

V. Balasubramanian

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NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 Jan 25 BLAST(R) searching in REGISTRY available in STN on the Web  
NEWS 3 Jan 29 FSTA has been reloaded and moves to weekly updates  
NEWS 4 Feb 01 DKILIT now produced by FIZ Karlsruhe and has a new update frequency  
NEWS 5 Feb 19 Access via Tymnet and SprintNet Eliminated Effective 3/31/02  
NEWS 6 Mar 08 Gene Names now available in BIOSIS  
NEWS 7 Mar 22 TOXLIT no longer available  
NEWS 8 Mar 22 TRCTHERMO no longer available  
NEWS 9 Mar 28 US Provisional Priorities searched with P in CA/CAplus and USPATFULL  
NEWS 10 Mar 28 LIPINSKI/CALC added for property searching in REGISTRY  
NEWS 11 Apr 02 PAPERCHEM no longer available on STN. Use PAPERCHEM2 instead.  
NEWS 12 Apr 08 "Ask CAS" for self-help around the clock  
NEWS 13 Apr 09 BEILSTEIN: Reload and Implementation of a New Subject Area  
NEWS 14 Apr 09 ZDB will be removed from STN  
NEWS 15 Apr 19 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB  
NEWS 16 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS  
NEWS 17 Apr 22 BIOSIS Gene Names now available in TOXCENTER  
NEWS 18 Apr 22 Federal Research in Progress (FEDRIP) now available

NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d,  
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),  
AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002

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FILE 'HOME' ENTERED AT 16:24:53 ON 06 MAY 2002

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=> file reg  
COST IN U.S. DOLLARS  
FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
0.21	0.21

FILE 'REGISTRY' ENTERED AT 16:24:58 ON 06 MAY 2002  
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STRUCTURE FILE UPDATES: 5 MAY 2002 HIGHEST RN 411206-65-0  
DICTIONARY FILE UPDATES: 5 MAY 2002 HIGHEST RN 411206-65-0

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

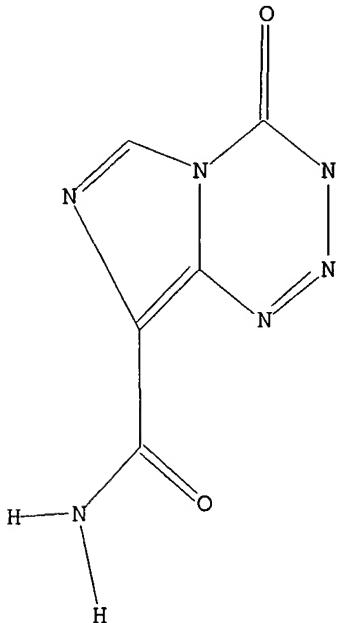
Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES  
for more information. See STNote 27, Searching Properties in the CAS  
Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>  
Uploading 10050488.str

L1 STRUCTURE uploaded

=> d 11  
L1 HAS NO ANSWERS  
L1 STR



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Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss sam  
SAMPLE SEARCH INITIATED 16:25:25 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 9 TO ITERATE

100.0% PROCESSED 9 ITERATIONS 3 ANSWERS  
SEARCH TIME: 00.00.01

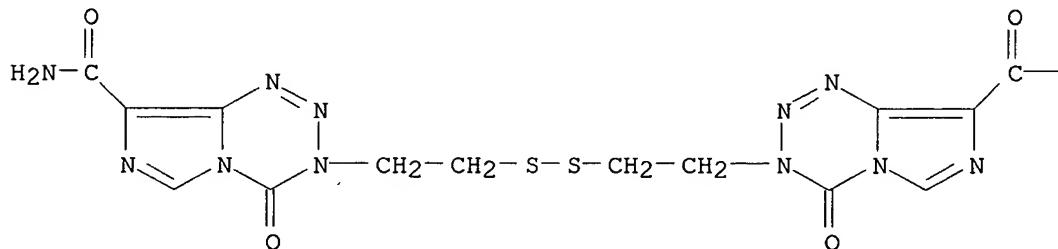
FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 9 TO 360  
PROJECTED ANSWERS: 3 TO 163

L2 3 SEA SSS SAM L1

=> d scan

L2 3 ANSWERS REGISTRY COPYRIGHT 2002 ACS  
IN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,3'-(dithiodi-2,1-ethanediyl)bis[3,4-dihydro-4-oxo- (9CI)  
MF C14 H14 N12 O4 S2

PAGE 1-A



PAGE 1-B

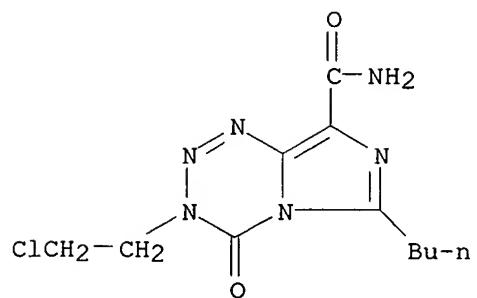
—NH2

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

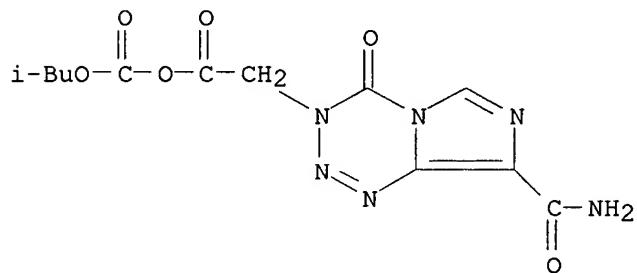
L2 3 ANSWERS REGISTRY COPYRIGHT 2002 ACS  
IN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 6-butyl-3-(2-chloroethyl)-3,4-dihydro-4-oxo- (9CI)  
MF C11 H15 Cl N6 O2

V. Balasubramanian



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 3 ANSWERS REGISTRY COPYRIGHT 2002 ACS  
IN Imidazo[5,1-d]-1,2,3,5-tetrazine-3(4H)-acetic acid, 8-(aminocarbonyl)-4-oxo-, anhydride with 2-methylpropyl hydrogen carbonate (9CI)  
MF C12 H14 N6 O6



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED

=> s 11 sss ful  
FULL SEARCH INITIATED 16:25:53 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 186 TO ITERATE

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SEARCH TIME: 00.00.01

L3 66 SEA SSS FUL L1

=> file reg  
COST IN U.S. DOLLARS SINCE FILE TOTAL  
FULL ESTIMATED COST ENTRY SESSION  
140.66 140.87

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FILE 'REGISTRY' ENTERED AT 16:26:00 ON 06 MAY 2002  
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TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

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conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES  
for more information. See STNote 27, Searching Properties in the CAS  
Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> s 13  
SAMPLE SEARCH INITIATED 16:26:08 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 9 TO ITERATE

100.0% PROCESSED 9 ITERATIONS 3 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 9 TO 360  
PROJECTED ANSWERS: 3 TO 163

L4 3 SEA SSS SAM L1

=> d 14 1-3 bib abs hitstr  
'BIB' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'  
'ABS' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'  
'HITSTR' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

The following are valid formats:

Substance information can be displayed by requesting individual  
fields or predefined formats. The predefined substance formats  
are: (RN = CAS Registry Number)

REG - RN  
SAM - Index Name, MF, and structure - no RN  
FIDE - All substance data, except sequence data  
IDE - FIDE, but only 50 names  
SQIDE - IDE, plus sequence data  
SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used  
SQD - Protein sequence data, includes RN  
SQD3 - Same as SQD, but 3-letter amino acid codes are used  
SQN - Protein sequence name information, includes RN  
  
CALC - Table of numeric properties  
PROP - Same as CALC

V. Balasubramanian

ABS -- Abstract  
APPS -- Application and Priority Information  
BIB -- CA Accession Number, plus Bibliographic Data  
CAN -- CA Accession Number  
CBIB -- CA Accession Number, plus Bibliographic Data (compressed)  
IND -- Index Data  
IPC -- International Patent Classification  
PATS -- PI, SO  
STD -- BIB, IPC, and NCL

IABS --ABS, indented, with text labels  
IBIB -- BIB, indented, with text labels  
ISTD -- STD format, indented

OBIB ----- AN, plus Bibliographic Data (original)  
OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations  
SIBIB ----- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.

The MAX format is the same as ALL.

The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

HELP DFIELDS -- To see a complete list of individual display fields.  
HELP FORMATS -- To see detailed descriptions of the predefined formats.  
Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ENTER DISPLAY FORMAT (IDE):end

=> d 14 1-3 bib abs hitstr  
'BIB' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'  
'ABS' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'  
'HITSTR' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

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SQD - Protein sequence data, includes RN  
SQD3 - Same as SQD, but 3-letter amino acid codes are used  
SQN - Protein sequence name information, includes RN

V. Balasubramanian

```
CALC - Table of numeric properties
PROP - Same as CALC

ABS -- Abstract
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SIBIB ----- IBIB, no citations
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Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:
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ENTER DISPLAY FORMAT (IDE):end
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The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

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REG - RN
SAM - Index Name, MF, and structure - no RN
FIDE - All substance data, except sequence data
IDE - FIDE, but only 50 names
SQIDE - IDE, plus sequence data
SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used
SQD - Protein sequence data, includes RN
```

V. Balasubramanian

SQD3 - Same as SQD, but 3-letter amino acid codes are used  
SQN - Protein sequence name information, includes RN  
  
CALC - Table of numeric properties  
PROP - Same as CALC  
  
ABS -- Abstract  
APPS -- Application and Priority Information  
BIB -- CA Accession Number, plus Bibliographic Data  
CAN -- CA Accession Number  
CBIB -- CA Accession Number, plus Bibliographic Data (compressed)  
IND -- Index Data  
IPC -- International Patent Classification  
PATS -- PI, SO  
STD -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels  
IBIB -- BIB, indented, with text labels  
ISTD -- STD format, indented

OBIB ----- AN, plus Bibliographic Data (original)  
OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations  
SIBIB ----- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.

The MAX format is the same as ALL.

The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

HELP DFIELDS -- To see a complete list of individual display fields.  
HELP FORMATS -- To see detailed descriptions of the predefined formats.  
Any CA File format may be combined with any substance format to  
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FILE 'CAPLUS' ENTERED AT 16:28:48 ON 06 MAY 2002  
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FILE COVERS 1907 - 6 May 2002 VOL 136 ISS 19  
FILE LAST UPDATED: 3 May 2002 (20020503/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> s 13  
L5 295 L3

=> s 15/prep  
FIELD CODES CANNOT BE CHANGED HERE  
You may have tried to apply a field code to a term that already has a field code. You can only add a field code to a term that has no field code appended to it.

=> s 13/prep  
295 L3  
2860177 PREP/RL  
L6 17 L3/PREP  
(L3 (L) PREP/RL)

=> d 16 1-17 bib abs hitstr

L6 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2002 ACS  
AN 2000:887417 CAPLUS  
DN 134:252318  
TI Antitumor imidazotetrazines. Part 39. Synthesis of bis(imidazotetrazine)s with saturated spacer groups  
AU Arrowsmith, Jill; Jennings, Sharon A.; Langnel, David A. F.; Wheelhouse, Richard T.; Stevens, Malcolm F. G.  
CS Cancer Research Laboratories, School of Pharmaceutical Sciences, University of Nottingham, University Park, Nottingham, NG7 2RD, UK  
SO Perkin 1 (2000), (24), 4432-4438  
CODEN: PERKF9; ISSN: 1470-4358  
PB Royal Society of Chemistry  
DT Journal  
LA English  
AB Bis(imidazotetrazine)s, related in structure to the antitumor agents mitozolomide and temozolomide, but linked through the N(3)-N(3') atoms of the imidazo[5,1-d][1,2,3,5]tetrazine ring-systems, are prep'd. by interaction of 5-diazoimidazole-4-carboxamide and diisocyanates. The presence of the polymethylene linker with/without sulfur and oxygen hetero atoms does not substantially affect the acid stability, base-catalyzed decomprn., antitumor activity or DNA base alkylation preference characteristic of the unlinked imidazotetrazines mitozolomide and temozolomide.  
IT 331456-52-1P

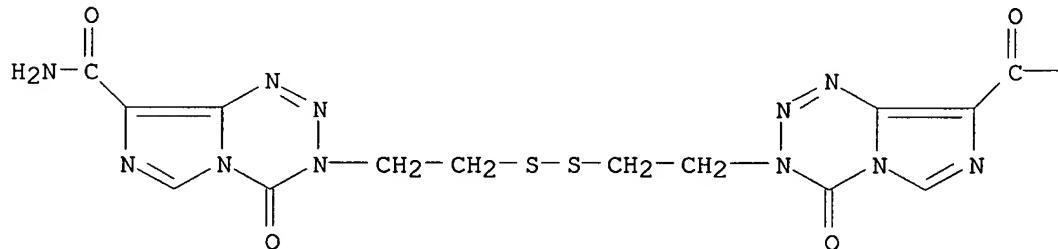
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**

(prepn. and antitumor activity of (alkanediyl)bis[imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide] derivs.)

RN 331456-52-1 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,3'-(dithiodi-2,1-ethanediyl)bis[3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

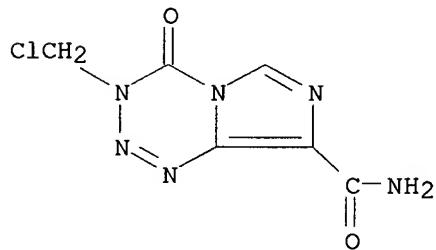
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IT 331456-36-1P 331456-37-2P 331456-38-3P  
331456-39-4P

RL: SPN (Synthetic preparation); **PREP (Preparation)**  
(prepn. of)

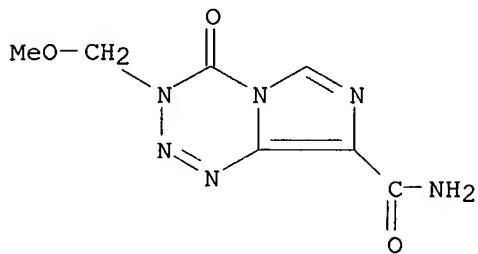
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CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(chloromethyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



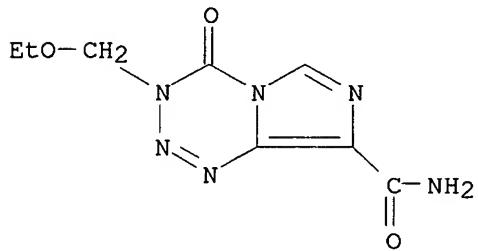
RN 331456-37-2 CAPLUS

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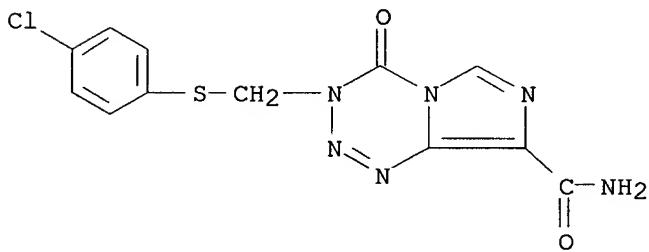
RN 331456-38-3 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(ethoxymethyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



RN 331456-39-4 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-[[(4-chlorophenyl)thio]methyl]-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



IT 331456-41-8P 331456-42-9P 331456-43-0P

331456-44-1P 331456-45-2P 331456-46-3P

331456-47-4P 331456-48-5P 331456-49-6P

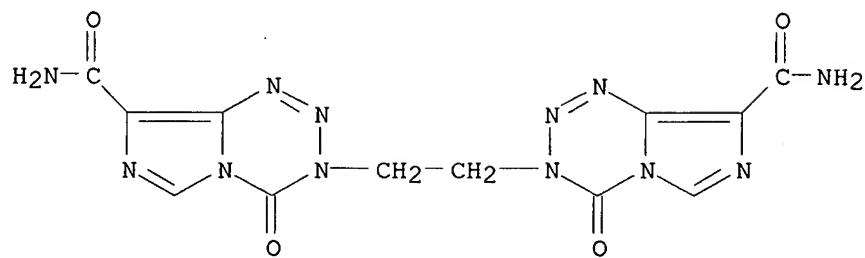
331456-50-9P 331456-51-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of (alkanediyl)bis[imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide] derivs.)

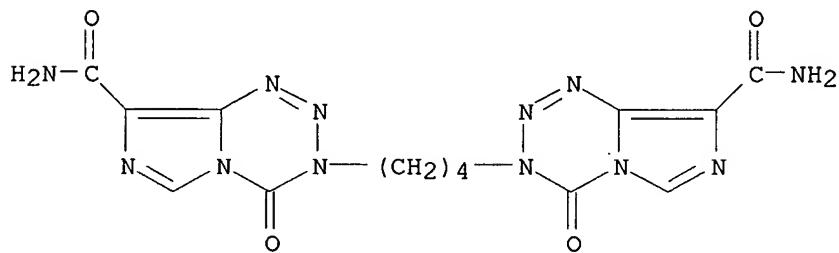
RN 331456-41-8 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,3'-(1,2-ethanediyl)bis[3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



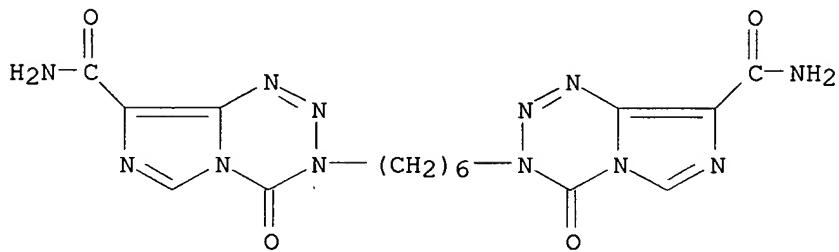
RN 331456-42-9 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,3'-(1,4-butanediyl)bis[3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



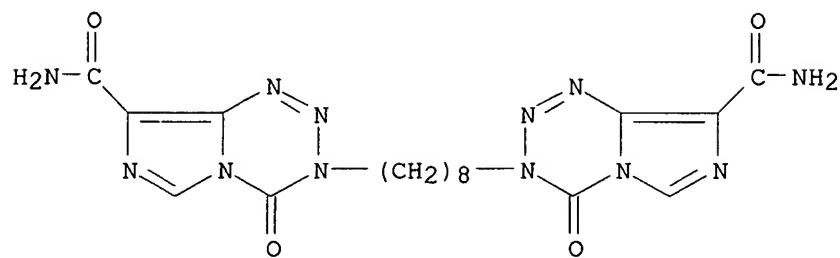
RN 331456-43-0 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,3'-(1,6-hexanediyyl)bis[3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



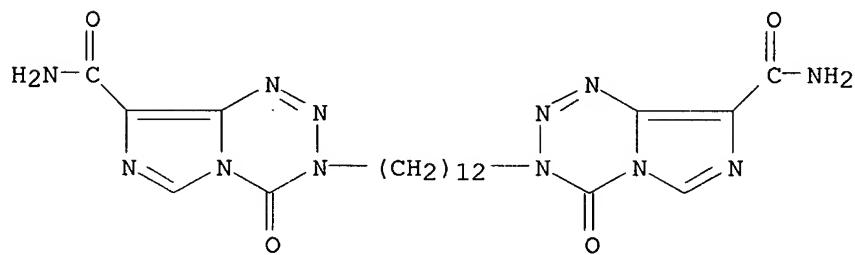
RN 331456-44-1 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,3'-(1,8-octanediyyl)bis[3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



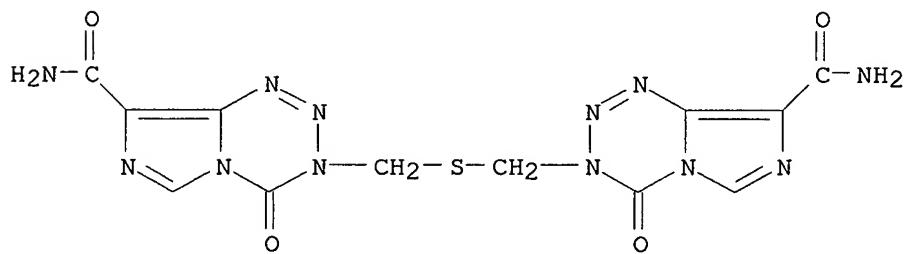
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CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,3'-(1,12-dodecanediyl)bis[3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



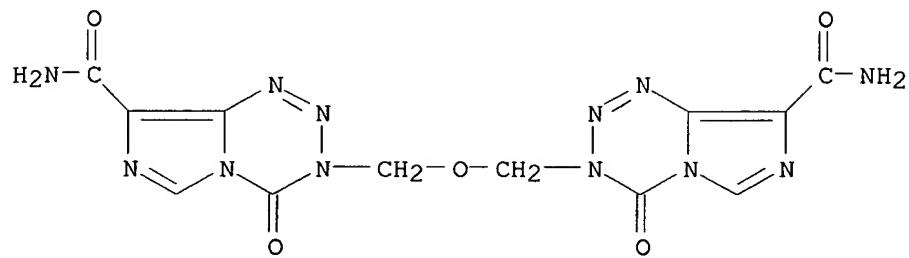
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CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,3'-(thiobis(methylene))bis[3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



RN 331456-47-4 CAPLUS

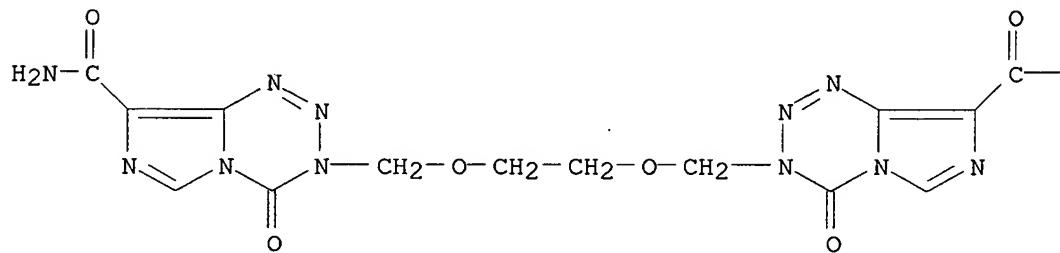
CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,3'-(oxybis(methylene))bis[3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



RN 331456-48-5 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,3'-[1,2-ethanediylbis(oxymethylene)]bis[3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

PAGE 1-A



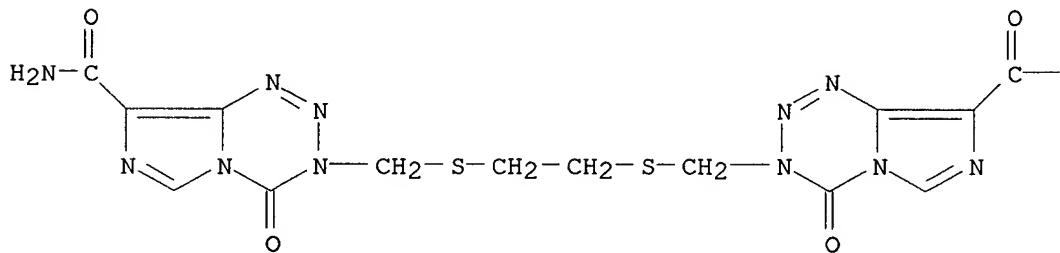
PAGE 1-B

—NH<sub>2</sub>

RN 331456-49-6 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,3'-[1,2-ethanediylbis(thiomethylene)]bis[3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

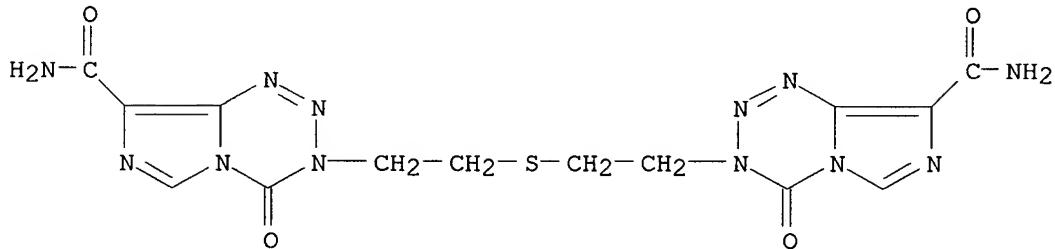
PAGE 1-A



— NH<sub>2</sub>

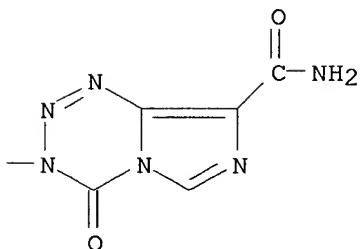
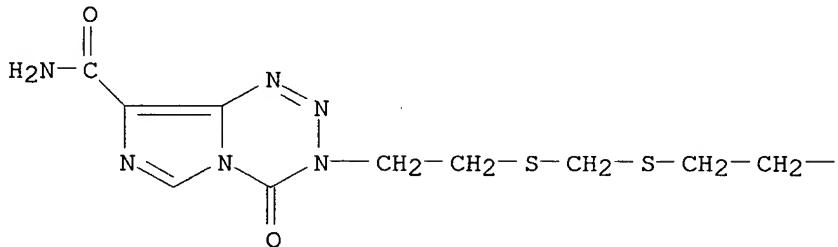
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CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,3'-(thiodi-2,1-ethanediyl)bis[3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



RN 331456-51-0 CAPLUS

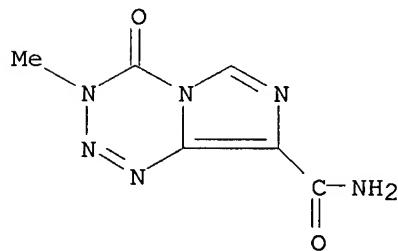
CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,3'-[methylenebis(thio-2,1-ethanediyl)]bis[3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2002 ACS

V. Balasubramanian

AN 1999:794749 CAPLUS  
DN 132:151791  
TI Pyrrolo[2,1-d][1,2,3,5]tetrazines, a new class of azolotetrazines related to the antitumor drug temozolamide  
AU Diana, Patrizia; Barraja, Paola; Lauria, Antonino; Almerico, Anna Maria; Dattolo, Gaetano; Cirrincione, Girolamo  
CS Dipartimento Farmacochimico-Tossicologico Biologico, Univ. Studi Palermo, Palermo, I-90123, Italy  
SO Synthesis (1999), (12), 2082-2086  
CODEN: SYNTBF; ISSN: 0039-7881  
PB Georg Thieme Verlag  
DT Journal  
LA English  
OS CASREACT 132:151791  
AB A series of pyrrolo[2,1-d][1,2,3,5]tetrazines, potential antineoplastic agents, was obtained in good yield from the reaction of 2-diazopyrroles with isocyanates at room temp. and in the dark. At. charges at C(4), a good parameter to predict the antineoplastic activity for this type of compds., are very close to that of temozolamide.  
IT 85622-93-1P, Temozolamide  
RL: PNU (Preparation, unclassified); PREP (Preparation)  
(prepn. and at. charge of pyrrolo[2,1-d][1,2,3,5]tetrazines related to temozolamide)  
RN 85622-93-1 CAPLUS  
CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-methyl-4-oxo- (9CI) (CA INDEX NAME)



RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2002 ACS  
AN 1998:259743 CAPLUS  
DN 129:27924  
TI Antitumor imidazotetrazines. Part 36. Conversion of 5-aminoimidazole-4-carboxamide to imidazo[5,1-d][1,2,3,5]tetrazin-4(3H)-ones and imidazo[1,5-a][1,3,5]triazin-4(3H)-ones related in structure to the antitumor agents temozolamide and mitozolamide  
AU Wang, Yongfeng; Wheelhouse, Richard T.; Zhao, Linxiang; Langnel, David A. F.; Stevens, Malcolm F. G.  
CS School of Pharmaceutical Sciences, Cancer Research Laboratories, Nottingham University, Nottingham, NG7 2RD, UK  
SO J. Chem. Soc., Perkin Trans. 1 (1998), (10), 1669-1675  
CODEN: JCPRB4; ISSN: 0300-922X  
PB Royal Society of Chemistry  
DT Journal  
LA English

V. Balasubramanian

AB Novel 3-substituted imidazo[5,1-d][1,2,3,5]tetrazinones have been prepd. by two routes: reaction of 5-diazoimidazole-4-carboxamide and isocyanates, and nitrosative cyclization of 5-amino-1-carbamoylimidazole-4-carboxamides. The latter cyclizations do not proceed efficiently when the 1-carbamoyl group bears an electron-donating alkyl group. 5-Amino-1-carbamoylimidazole-4-carboxamides cyclize with tri-Et orthoformate or tri-Et orthobenzoate to yield imidazo[1,5-a][1,3,5]triazinones. A 1H NMR study of the decompn. of 8-carbamoyl-3-ethylimidazo[5,1-d][1,2,3,5]tetrazin-4(3H)-one in deuteriated phosphate buffer has shown that its ethylating capacity is attenuated by the unproductive generation of ethene. This observation explains why the ethylimidazotetrazine possesses weaker antitumor properties than the clin.-used congener temozolomide.

IT 97716-74-0P 208107-15-7P

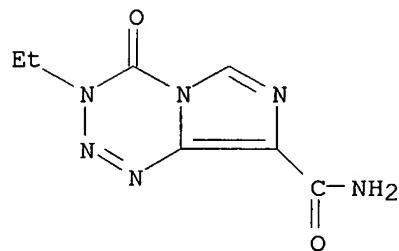
RL: RCT (Reactant); SPN (Synthetic preparation); PREP

**(Preparation)**

(prepn. of imidazo[5,1-d][1,2,3,5]tetrazin-4(3H)-ones and imidazo[1,5-a][1,3,5]triazin-4(3H)-ones)

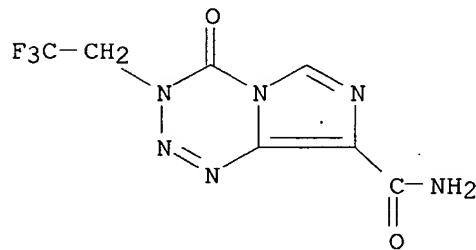
RN 97716-74-0 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-ethyl-3,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)



RN 208107-15-7 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-4-oxo-3-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)



IT 85622-95-3P, Mitozolomide 85623-02-5P

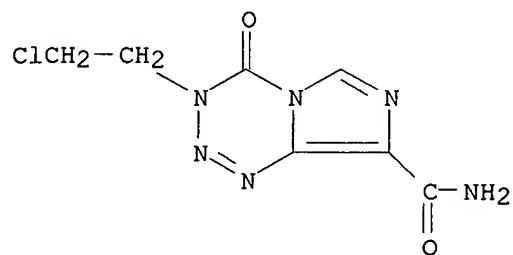
208107-14-6P 208107-16-8P 208107-17-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of imidazo[5,1-d][1,2,3,5]tetrazin-4(3H)-ones and imidazo[1,5-a][1,3,5]triazin-4(3H)-ones)

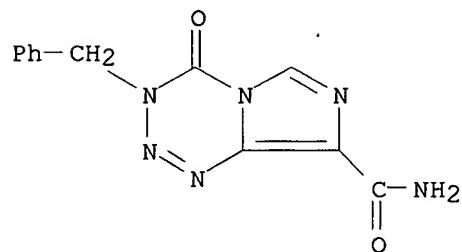
RN 85622-95-3 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



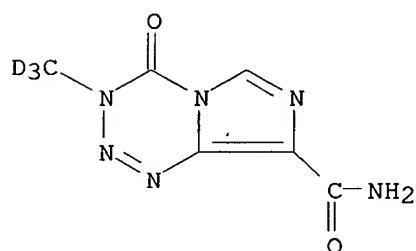
RN 85623-02-5 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-4-oxo-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



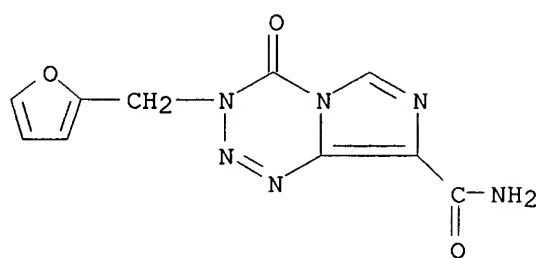
RN 208107-14-6 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-(methyl-d3)-4-oxo- (9CI) (CA INDEX NAME)



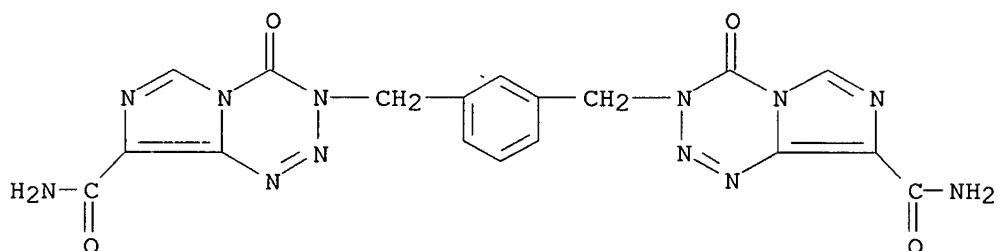
RN 208107-16-8 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-furanylmethyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



RN 208107-17-9 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,3'-(1,3-phenylenebis(methylene))bis[3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



L6 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2002 ACS

AN 1997:684618 CAPLUS

DN 127:293195

TI Antitumor Imidazotetrazines. 35. New Synthetic Routes to the Antitumor Drug Temozolomide

AU Wang, Yongfeng; Stevens, Malcolm F. G.; Chan, Tze-ming; DiBenedetto, Donald; Ding, Zhe-xing; Gala, Dinesh; Hou, Donald; Kugelman, Max; Leong, William; Kuo, Shen-chun; Mas, Janet L.; Schumacher, Doris P.; Shutts, Bruce P.; Smith, Lyman; Zhan, Zheng-Yun J.; Thomson, William T.

CS Cancer Research Laboratories Department of Pharmaceutical Sciences, University of Nottingham, Nottingham, NG7 2RD, UK

SO J. Org. Chem. (1997), 62(21), 7288-7294

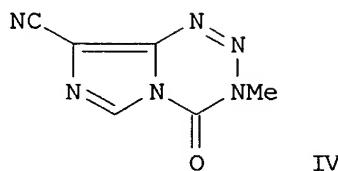
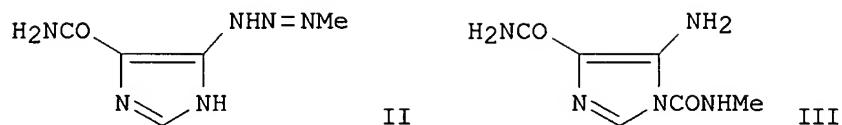
CODEN: JOCEAH; ISSN: 0022-3263

PB American Chemical Society

DT Journal

LA English

GI



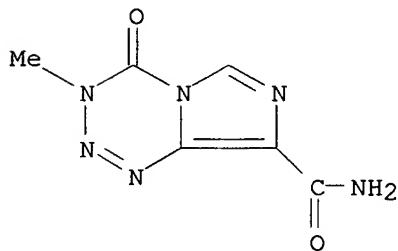
AB Three new pathways to the antitumor drug temozolomide (I) were explored via intermediate imidazolecarboxamides II and III and the imidazotetrazinone IV. The key intermediate III was converted to I in 45% yield by employing NaNO<sub>2</sub> in aq. tartaric acid at 0-5 degree.. III was prep'd. from 5-amino-1-[[4-nitrophenyl]oxy]carbonyl]imidazole-4-carboxamide and MeNH<sub>2</sub> or directly from 5-aminoimidazole-4-carboxamide and either MeNCO or MeNHCOC<sub>1</sub>. I was also prep'd. from IV by hydrolysis to the HCl salt of I in 10 M HCl. IV was prep'd. from either 5-diazoimidazole-4-carbonitrile and MeNCO or by diazotization of 5-amino-1-(N-methylcarbamoyl)imidazole-4-carbonitrile. Attempts to cyclize II with phosgene or phosgene equiv. were unsuccessful and only 2-azahypoxanthine was isolated.

IT 85622-93-1P, Temozolomide

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of temozolomide by cyclization of imidazolecarboxamides)

RN 85622-93-1 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-methyl-4-oxo- (9CI) (CA INDEX NAME)

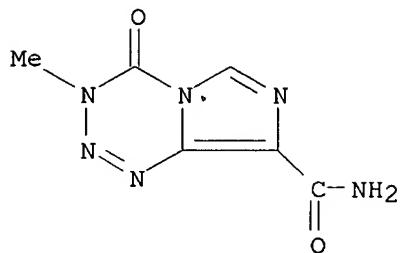


IT 196806-18-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of temozolomide hydrochloride by hydrolysis of cyanotemozolomide)

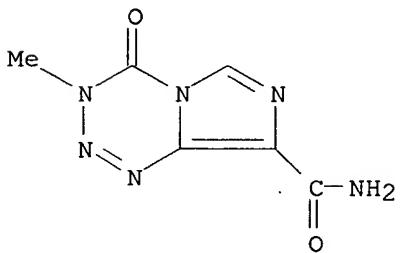
RN 196806-18-5 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-methyl-4-oxo-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

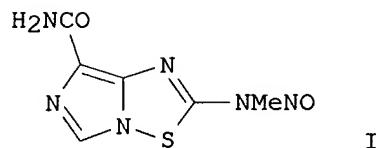
L6 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2002 ACS  
AN 1997:417852 CAPLUS  
DN 127:89996  
TI Temozolomide: a review of its discovery, chemical properties, pre-clinical development and clinical trials  
AU Newlands, E. S.; Stevens, M. F. G.; Wedge, S. R.; Wheelhouse, R. T.; Brock, C.  
CS Dep. Med. Oncology, Charing Cross Hospital, London, W6 8RF, UK  
SO Cancer Treat. Rev. (1997), 23(1), 35-61  
CODEN: CTREDJ; ISSN: 0305-7372  
PB Saunders  
DT Journal; General Review  
LA English  
AB A review with 106 refs. on the synthesis of, mechanism of antitumor activity of and clin. trials with temozolomide.  
IT **85622-93-1P**, Temozolomide.  
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (**Preparation**); USES (Uses)  
      (temozolomide: discovery, chem. properties, pre-clin. development and clin. trials)  
RN 85622-93-1 CAPLUS  
CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-methyl-4-oxo- (9CI) (CA INDEX NAME)



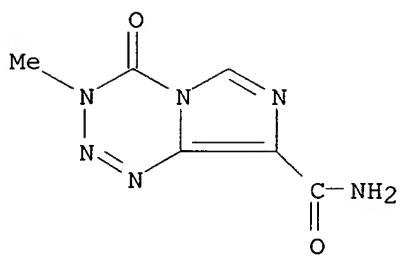
L6 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2002 ACS  
AN 1997:168958 CAPLUS  
DN 126:264081  
TI A new route to the antitumor drug temozolomide, but not thiotemozolomide

V. Balasubramanian

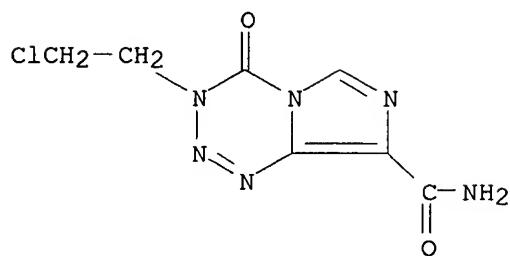
AU Wang, Yongfeng; Lowe, Philip R.; Thomson, William T.; Clark, Jonathan; Stevens, Malcolm F. G.  
 CS Cancer Res. Lab., Univ. Nottingham, Nottingham, NG7 2RD, UK  
 SO Chem. Commun. (Cambridge) (1997), (4), 363-364  
 CODEN: CHCOFS; ISSN: 1359-7345  
 PB Royal Society of Chemistry  
 DT Journal  
 LA English  
 OS CASREACT 126:264081  
 GI



AB Interaction of 5-aminoimidazole-4-carboxamide with alkyl isocyanates yields N-substituted 1-carbamoylimidazoles which can be cyclized to imidazo[5,1-d][1,2,3]tetrazin-4(3H)-ones, including temozolomide, on nitrosation; a similar reaction with Me isothiocyanate, followed by nitrosation, affords the nitrosomethylamino deriv. I of a new ring-system, imidazo[1,5-b][1,2,4]thiadiazole.  
 IT 85622-93-1P 85622-95-3P 85623-02-5P  
 97716-74-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of temozolomide and imidazo[1,5-b][1,2,4]thiadiazole deriv.)  
 RN 85622-93-1 CAPLUS  
 CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-methyl-4-oxo- (9CI) (CA INDEX NAME)

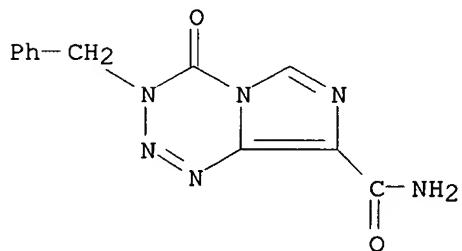


RN 85622-95-3 CAPLUS  
 CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



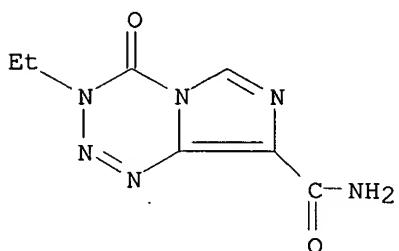
RN 85623-02-5 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-4-oxo-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 97716-74-0 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-ethyl-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



L6 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2002 ACS

AN 1996:108643 CAPLUS

DN 124:232405

TI Synthetic studies of 8-carbamoylimidazo-[5,1-D]-1,2,3,5-tetrazin-4(3H)-one: a key derivative of antitumor drug temozolomide

AU Wang, Yongfeng; Stevens, Malcolm F. G.

CS Cancer Res. Campaign Experimental Cancer Chemotherapy Res. Group, Univ. Nottingham, Nottingham, NG7 2RD, UK

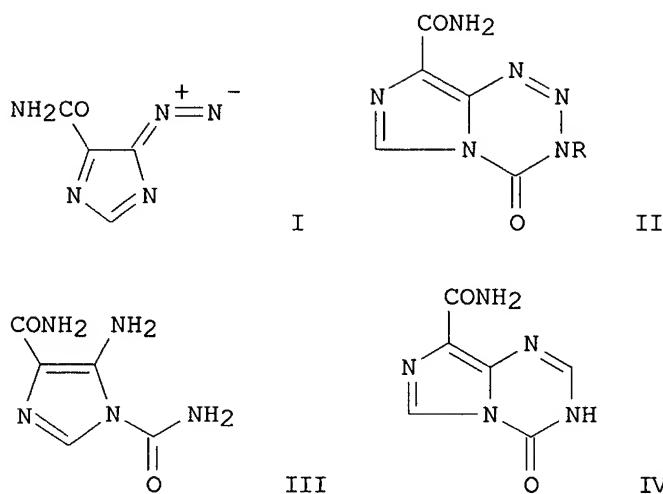
SO Bioorg. Med. Chem. Lett. (1996), 6(2), 185-8

CODEN: BMCLE8; ISSN: 0960-894X

DT Journal

LA English

OS CASREACT 124:232405



AB 5-Diazoimidazole-4-carboxamide (I) reacted with trimethylsilyl isocyanate in acetonitrile to afford 8-carbamoylimidazo[5,1-d]1,2,3,5-tetrazin-4(3H)-one (II; R = H), which was undergoing a methylation to give antitumor drug temozolomide (II; R = Me); while 1,5-dicarbamoylaminoimidazole (III) failed in an azo-cyclization to give II (R = H) but accomplished a carbon-cyclization to produce 8-carbamoylimidazo[1,5-a]s-triazin-4(3H)-one (IV).

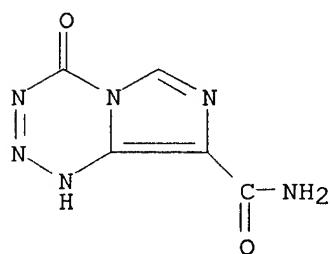
IT **108030-65-5P**, Nortemozolomide

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

(synthetic studies with carbamoylimidazotetrazinone)

RN 108030-65-5 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



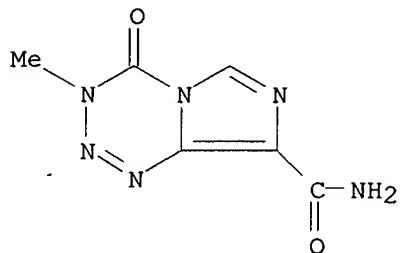
IT **85622-93-1P**, Temozolomide **85623-02-5P**

RL: SPN (Synthetic preparation); PREP (Preparation)

(synthetic studies with carbamoylimidazotetrazinone)

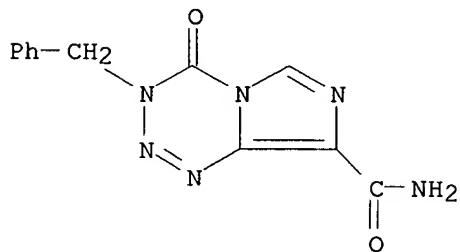
RN 85622-93-1 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-methyl-4-oxo- (9CI) (CA INDEX NAME)



RN 85623-02-5 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-4-oxo-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



L6 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2002 ACS

AN 1995:933775 CAPLUS

DN 124:117266

TI Antitumor imidazotetrazines. Part 33. New syntheses of the antitumor drug temozolomide using 'masked' methyl isocyanates

AU Wang, Yongfeng; Stevens, Malcolm F. G.; Thomson, William T.; Shutts, Bruce P.

CS Cancer Res. Lab., Dep. Pharmaceutical Sci., Univ. Nottingham, Nottingham, NG7 2RD, UK

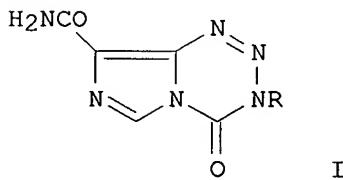
SO J. Chem. Soc., Perkin Trans. 1 (1995), (21), 2783-7  
CODEN: JCPRB4; ISSN: 0300-922X

DT Journal

LA English

OS CASREACT 124:117266

GI



AB The imidazotetrazinylacetate I [R = CH2CO2Et] can be prepd. by treating 5-diazoimidazole-4-carboxamide with Et isocyanatoacetate or by diazotization of N-(5-amino-4-carbamoylimidazol-1-ylcarbonyl)glycine Et ester. Hydrolysis to the acid and Barton radical decarboxylation affords

V. Balasubramanian

temozolomide (II) (26%) whereas deprotection of I [R = CH<sub>2</sub>SiMe<sub>3</sub>] with TBAF in acetonitrile-acetic acid gives 78% II. I [R = CH<sub>2</sub>Ph, CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>OMe-4, CHPh<sub>2</sub>] are stable to hydrogenolytic or oxidative debenzylation reactions.

IT 157466-97-2P 157466-98-3P 157466-99-4P

157467-00-0P 172988-50-0P 172988-51-1P

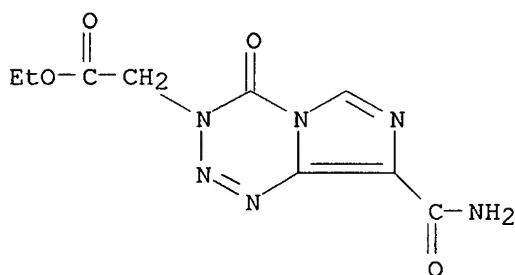
RL: RCT (Reactant); SPN (Synthetic preparation); PREP

**(Preparation)**

(prepn. of temozolomide and related imidazotetrazines using masked Me isocyanates)

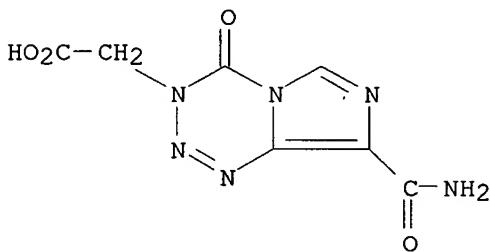
RN 157466-97-2 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-3(4H)-acetic acid, 8-(aminocarbonyl)-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)



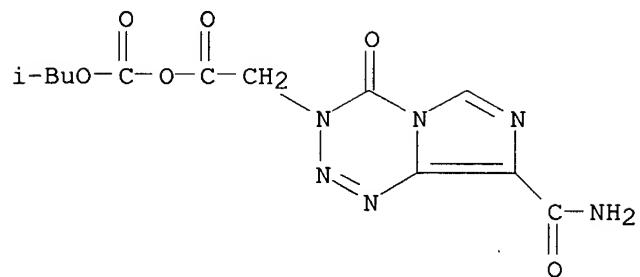
RN 157466-98-3 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-3(4H)-acetic acid, 8-(aminocarbonyl)-4-oxo- (9CI) (CA INDEX NAME)



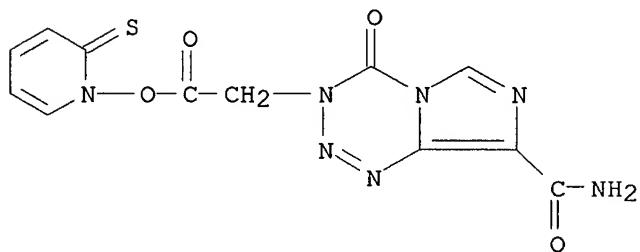
RN 157466-99-4 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-3(4H)-acetic acid, 8-(aminocarbonyl)-4-oxo-, anhydride with 2-methylpropyl hydrogen carbonate (9CI) (CA INDEX NAME)



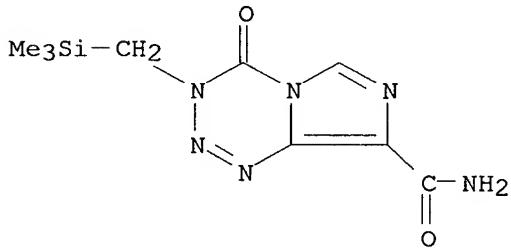
RN 157467-00-0 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-4-oxo-3-[2-oxo-2-[(2-thioxo-1(2H)-pyridinyl)oxy]ethyl]- (9CI) (CA INDEX NAME)



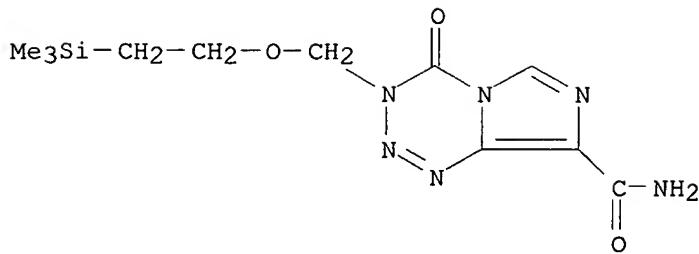
RN 172988-50-0 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-4-oxo-3-[(trimethylsilyl)methyl]- (9CI) (CA INDEX NAME)



RN 172988-51-1 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-4-oxo-3-[[2-(trimethylsilyl)ethoxy]methyl]- (9CI) (CA INDEX NAME)



IT 85622-93-1P, Temozolomide 85623-02-5P

85623-05-8P 172988-48-6P 172988-49-7P

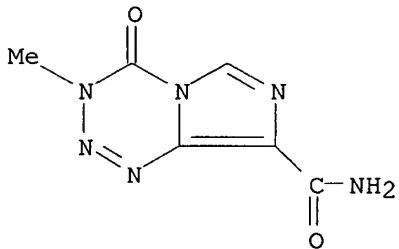
172988-52-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of temozolomide and related imidazotetrazines using masked Me isocyanates)

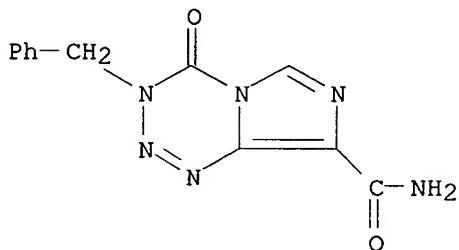
RN 85622-93-1 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-methyl-4-oxo- (9CI) (CA INDEX NAME)



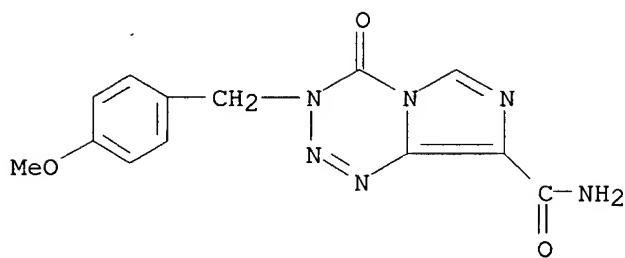
RN 85623-02-5 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-4-oxo-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



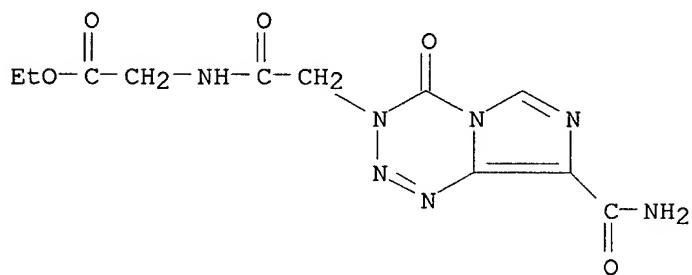
RN 85623-05-8 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-[(4-methoxyphenyl)methyl]-4-oxo- (9CI) (CA INDEX NAME)



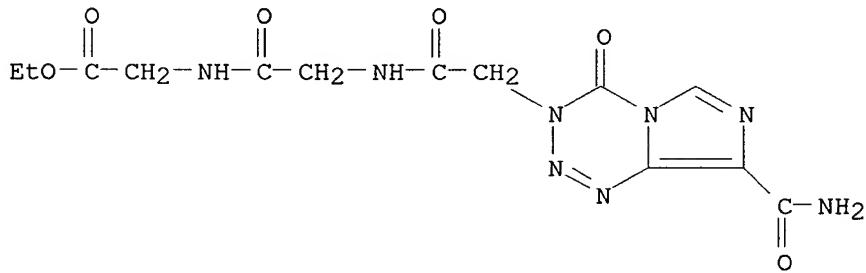
RN 172988-48-6 CAPLUS

CN Glycine, N-[8-(aminocarbonyl)-4-oxoimidazo[5,1-d]-1,2,3,5-tetrazin-3(4H)-yl]acetyl-, ethyl ester (9CI) (CA INDEX NAME)



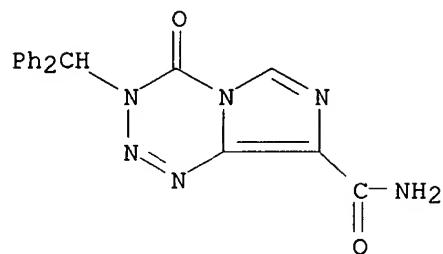
RN 172988-49-7 CAPLUS

CN Glycine, N-[[8-(aminocarbonyl)-4-oxoimidazo[5,1-d]-1,2,3,5-tetrazin-3(4H)-yl]acetyl]glycyl-, ethyl ester (9CI) (CA INDEX NAME)

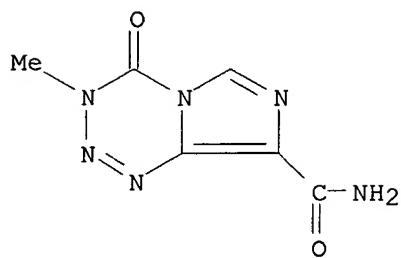


RN 172988-52-2 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(diphenylmethyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

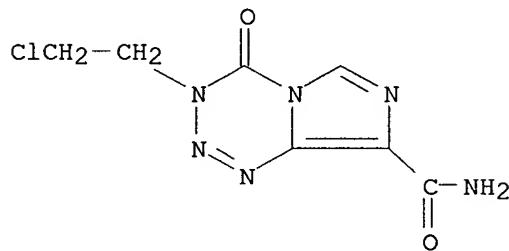


L6 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2002 ACS  
 AN 1995:508250 CAPLUS  
 DN 123:198751  
 TI Antitumor Imidazotetrazines. 32.1 Synthesis of Novel Imidazotetrazinones and Related Bicyclic Heterocycles To Probe the Mode of Action of the Antitumor Drug Temozolomide  
 AU Clark, A. S.; Deans, B.; Stevens, M. F. G.; Tisdale, M. J.; Wheelhouse, R. T.; Denny, B. J.; Hartley, J. A.  
 CS Pharmaceutical Sciences Institute, Aston University, Birmingham, B4 7ET, UK  
 SO J. Med. Chem. (1995), 38(9), 1493-504  
 CODEN: JMCMAR; ISSN: 0022-2623  
 DT Journal  
 LA English  
 AB A series of new imidazo[5,1-d]-1,2,3,5-tetrazinones with addnl. hydrogen-bonding or ionic substituents at the 8-carboxamide position of the antitumor drugs temozolomide and mitozolomide were prep'd. None of these compds. were significantly more cytotoxic in vitro against the mouse TLX5 lymphoma than the lead structures. Mol. modeling techniques were used to design benzo- and pyrazolo[4,3-d]-1,2,3-triazinones bearing carboxamide groups in appropriate positions which are isosteric with temozolomide and mitozolomide but which cannot ring open to alkylating species. As predicted, these compds. have no inhibitory properties against human GM892A or Raji cell lines in vitro. Temozolomide and the spermidine-temozolomide conjugate 28 preferentially methylate guanines within guanine-rich sequences in DNA, but no exptl. evidence has been found to support the hypothesis that such regions are involved in catalyzing the ring opening of the imidazotetrazinone prodrugs to their active forms.  
 IT 85622-93-1DP, Temozolomide, derivs. 85622-95-3DP,  
 Mitozolomide, derivs.  
 RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (prepn. of imidazotetrazinones as probes for action of temozolomide)  
 RN 85622-93-1 CAPLUS  
 CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-methyl-4-oxo- (9CI) (CA INDEX NAME)



RN 85622-95-3 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



L6 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2002 ACS

AN 1995:374136 CAPLUS

DN 122:214043

TI Antitumor imidazotetrazines. Part 31. The synthesis of isotopically labeled temozolomide and a multinuclear (<sup>1</sup>H, <sup>13</sup>C, <sup>15</sup>N) magnetic resonance investigation of temozolomide and mitozolomide

AU Wheelhouse, Richard T.; Wilman, Derry E. V.; Thomson, William; Stevens, Malcolm F. G.

CS Cancer Res. Laboratories, Univ. Nottingham, Nottingham, NG7 2RD, UK

SO J. Chem. Soc., Perkin Trans. 1 (1995), (3), 249-52

CODEN: JCPRB4; ISSN: 0300-922X

DT Journal

LA English

OS CASREACT 122:214043

AB The antitumor drug temozolomide has been synthesized isotopically labeled with NMR active nuclei at a variety of sites and all its <sup>13</sup>C and <sup>15</sup>N NMR spectral resonances have been assigned. At low pH a site of protonation has been identified which accounts for the acid stability of the drug.

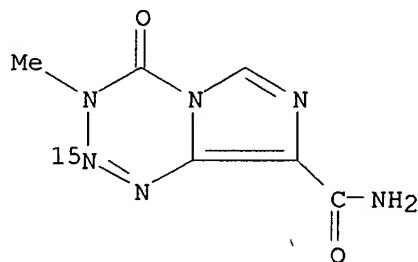
IT 162021-24-1P 162021-28-5P 162021-29-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis of isotopically labeled temozolomide and a multinuclear magnetic resonance investigation of temozolomide and mitozolomide)

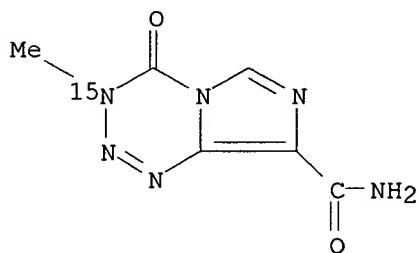
RN 162021-24-1 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-2-<sup>15</sup>N-8-carboxamide, 3,4-dihydro-3-methyl-4-oxo- (9CI) (CA INDEX NAME)



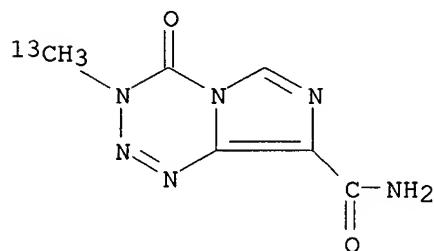
RN 162021-28-5 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-3-15N-8-carboxamide, 3,4-dihydro-3-methyl-4-oxo- (9CI) (CA INDEX NAME)



RN 162021-29-6 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-(methyl-13C)-4-oxo- (9CI) (CA INDEX NAME)



L6 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2002 ACS

AN 1994:557614 CAPLUS

DN 121:157614

TI Alternative syntheses of the antitumor drug temozolomide avoiding the use of methyl isocyanate

AU Wang, Yongfeng; Stevens, Malcolm F. G.; Thomson, W.

CS Cancer Res. Lab., Univ. Nottingham, Nottingham, NG7 2RD, UK

SO J. Chem. Soc., Chem. Commun. (1994), (14), 1687-8

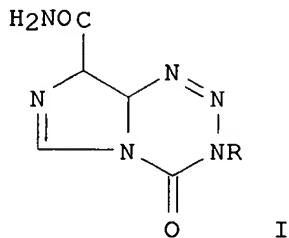
CODEN: JCCCAT; ISSN: 0022-4936

DT Journal

LA English

OS CASREACT 121:157614

GI



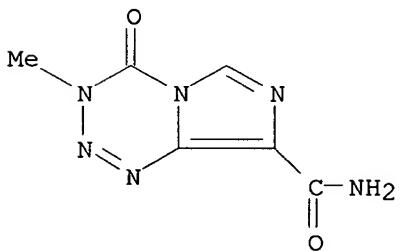
AB Et (8-carbamoyl-3,4-dihydro-4-oxoimidazo[5,1-d]-1,2,3,5-tetrazin-3-yl)acetate (I, R = CH<sub>2</sub>CO<sub>2</sub>Et) can be prep'd. by two routes starting from 5-aminoimidazole-4-carboxamide; hydrolysis of I (R = CH<sub>2</sub>CO<sub>2</sub>Et) to the corresponding carboxylic acid followed by Barton radical decarboxylation gives the antitumor imidazotetrazinone temozolomide (I, R = Me).

IT **85622-93-1P**, Temozolomide

RL: SPN (Synthetic preparation); PREP (Preparation)  
(alternative synthesis of)

RN 85622-93-1 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-methyl-4-oxo- (9CI) (CA INDEX NAME)



IT **157466-97-2P 157466-98-3P 157466-99-4P**

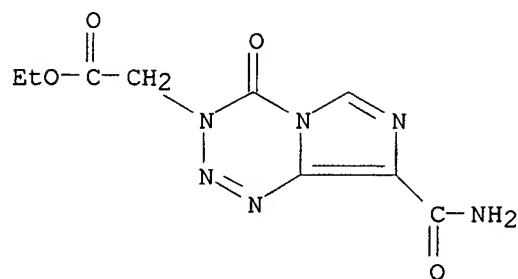
**157467-00-0P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP  
(Preparation)

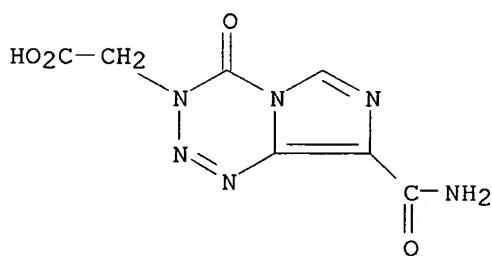
(prepn. and reaction of, in synthesis of temozolomide)

RN 157466-97-2 CAPLUS

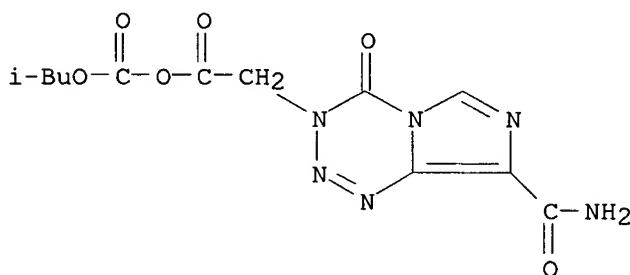
CN Imidazo[5,1-d]-1,2,3,5-tetrazine-3(4H)-acetic acid, 8-(aminocarbonyl)-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)



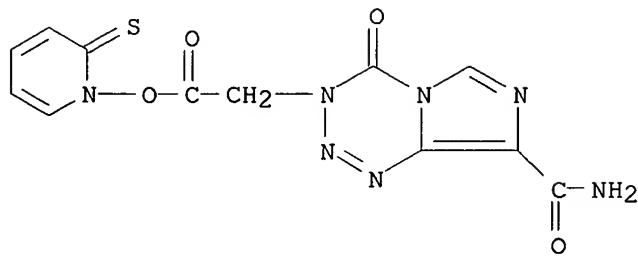
RN 157466-98-3 CAPLUS  
CN Imidazo[5,1-d]-1,2,3,5-tetrazine-3(4H)-acetic acid, 8-(aminocarbonyl)-4-oxo- (9CI) (CA INDEX NAME)



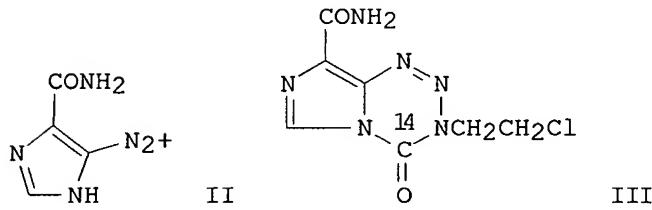
RN 157466-99-4 CAPLUS  
CN Imidazo[5,1-d]-1,2,3,5-tetrazine-3(4H)-acetic acid, 8-(aminocarbonyl)-4-oxo-, anhydride with 2-methylpropyl hydrogen carbonate (9CI) (CA INDEX NAME)



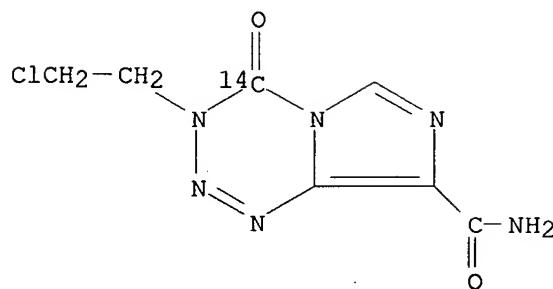
RN 157467-00-0 CAPLUS  
CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-4-oxo-3-[2-oxo-2-[(2-thioxo-1(2H)-pyridinyl)oxy]ethyl]- (9CI) (CA INDEX NAME)



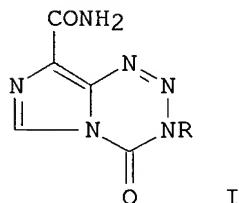
L6 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2002 ACS  
 AN 1989:94466 CAPLUS  
 DN 110:94466  
 TI Carbon-14 labeling of 2-chloroethyl isocyanate. Application to the labeling of (chloroethyl)tetrazinone and (chloroethyl)nitrosoureas  
 AU Madelmont, J. C.; Moreau, M. F.; Godeneche, D.; Labarre, P.; Veyre, A.  
 CS INSERM, Clermont-Ferrand, 63005, Fr.  
 SO J. Labelled Compd. Radiopharm. (1988), 25(10), 1135-42  
 CODEN: JLCRD4; ISSN: 0362-4803  
 DT Journal  
 LA French  
 OS CASREACT 110:94466  
 GI



AB Isocyanate ClCH<sub>2</sub>CH<sub>2</sub>N<sup>14</sup>CO (I) was prep'd. from ClCH<sub>2</sub>CH<sub>2</sub>14CO<sub>2</sub>H via the acyl azide. I was converted to an aryl carbamate, and subsequent nitrosation, amidation (MeSCH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub>), and oxidn. gave ureas MeS(O)<sub>n</sub>CH<sub>2</sub>CH<sub>2</sub>NH<sup>14</sup>CON(NO)CH<sub>2</sub>CH<sub>2</sub>Cl (n = 1, 2). The reaction of I with imidazolediazonium compd. II gave 14C-labeled mitozolomide (III).  
 IT - 118971-95-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)  
 RN 118971-95-2 CAPLUS  
 CN Imidazo[5,1-d]-1,2,3,5-tetrazine-4-14C-8-carboxamide, 3-(2-chloroethyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



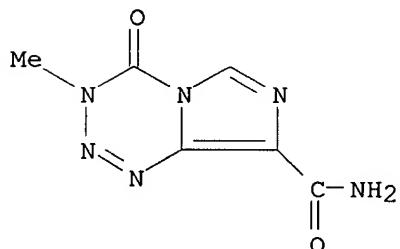
L6 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2002 ACS  
 AN 1988:68357 CAPLUS  
 DN 108:68357  
 TI Antitumor activity and pharmacokinetics in mice of 8-carbamoyl-3-methylimidazo[5,1-d]-1,2,3,5-tetrazin-4(3H)-one (CCRG 81045; M & B 39831), a novel drug with potential as an alternative to dacarbazine  
 AU Stevens, Malcolm F. G.; Hickman, John A.; Langdon, Simon P.; Chubb, David; Vickers, Lisa; Stone, Robert; Baig, Ghousia; Goddard, Colin; Gibson, Neil W.; et al.  
 CS Pharm. Sci. Inst., Aston Univ., Birmingham, B4 7ET, UK  
 SO Cancer Res. (1987), 47(22), 5846-52  
 CODEN: CNREAA; ISSN: 0008-5472  
 DT Journal  
 LA English  
 GI



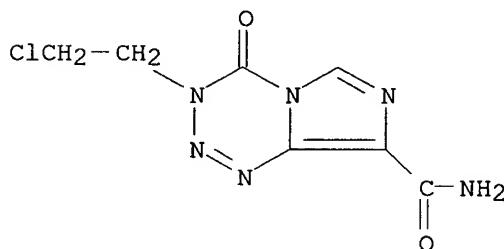
AB A no. of 3-alkyl analogs [I, e.g., R = Me, Et, (CH<sub>2</sub>)<sub>2</sub>Br, or Pr] of the exptl. antitumor drug mitozolomide [I, R = (CH<sub>2</sub>)<sub>2</sub>Cl] were screened against murine tumors in vivo. Only the compds. with a 3-methyl- or 3-bromoethyl group had significant antitumor activity against the TLX5 lymphoma. The 3-Me analog, CCRG 81045 (II) had good activity, when administered i.p., against L1210 and P388 leukemias, M5076 reticulum cell sarcoma, B16 melanoma, and ADJ/PC6A plasmacytoma. II was also active when administered orally to mice bearing the L1210 leukemia. A daily schedule of 100 mg/kg II for 5 days produced increases of survival time of treated animals compared to controls of 176 and >235% against the P388 and L1210 leukemias, resp. In the female C57BL .times.. DBA/2 F1 mouse the 10% LD was 125 mg/kg daily for 5 days. II underwent mild alk. hydrolysis and ring fission to form the linear triazene, 5-(3-methyltriazene-1-yl)imidazole-4-carboxamide (III), which is the putative metabolite formed upon metabolic activation of the antitumor drug dacarbazine [5-(3,3-dimethyltriazene-1-yl)imidazole-4-carboxamide]. The half-life of II at 37.degree. in 0.2M phosphate buffer (pH 7.4) was 1.24 h, whereas

that of III at 25.degree. was 8 min. The half-life of II in human plasma in vitro at 37.degree. was 0.42 h. Pharmacokinetic expts. conducted in BALB/c mice produced plasma profiles of II, administered i.p. or orally, which showed a rapid absorption phase, elimination half-lives of 1.13 h (i.p.) and 1.29 h (oral) and a bioavailability of 0.98.

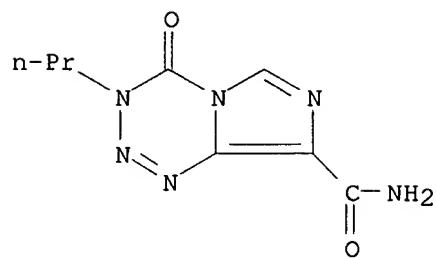
IT 85622-93-1P, CCRG 81045 85622-95-3P, Mitozolomide  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and antitumor activity and pharmacokinetics of)  
 RN 85622-93-1 CAPLUS  
 CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-methyl-4-oxo-  
 (9CI) (CA INDEX NAME)



RN 85622-95-3 CAPLUS  
 CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

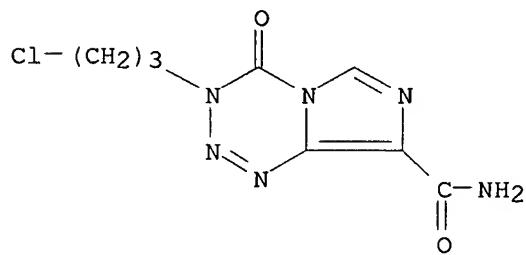


IT 85622-94-2P 85622-97-5P 85622-98-6P  
 85622-99-7P 85623-01-4P 85623-02-5P  
 85623-03-6P 97716-74-0P 108030-65-5DP, derivs.  
 112557-08-1P 112557-09-2P  
 RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. and antitumor activity of)  
 RN 85622-94-2 CAPLUS  
 CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-4-oxo-3-propyl- (9CI) (CA INDEX NAME)



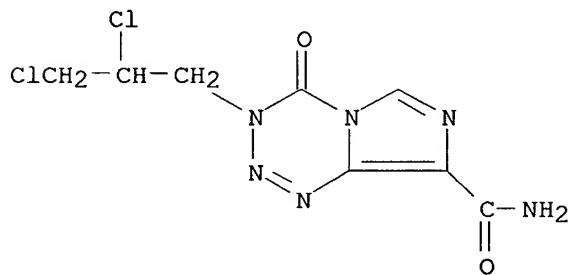
RN 85622-97-5 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(3-chloropropyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



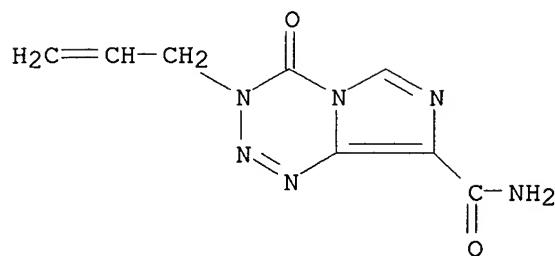
RN 85622-98-6 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2,3-dichloropropyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



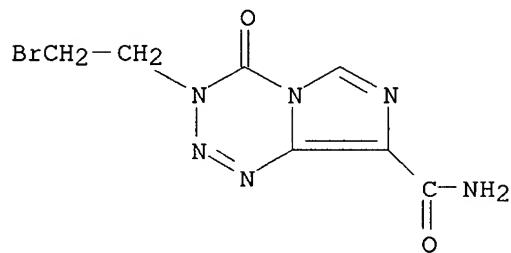
RN 85622-99-7 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-4-oxo-3-(2-propenyl)- (9CI) (CA INDEX NAME)



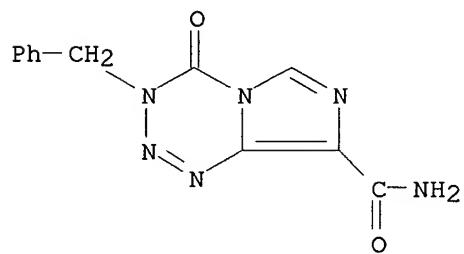
RN 85623-01-4 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-bromoethyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



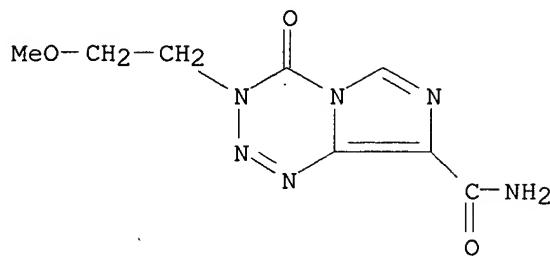
RN 85623-02-5 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-4-oxo-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



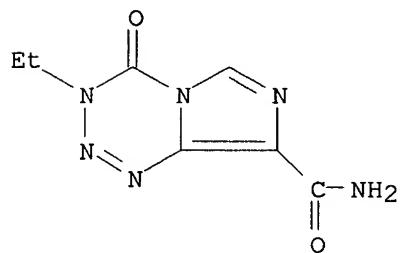
RN 85623-03-6 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-(2-methoxyethyl)-4-oxo- (9CI) (CA INDEX NAME)



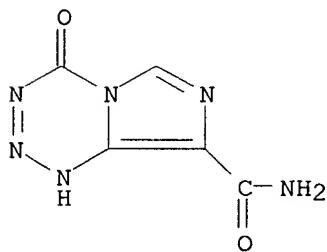
RN 97716-74-0 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-ethyl-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



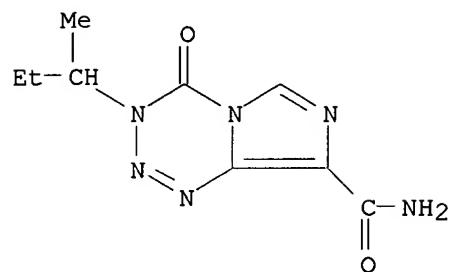
RN 108030-65-5 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



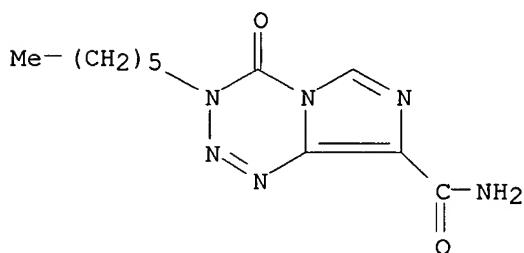
RN 112557-08-1 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-(1-methylpropyl)-4-oxo- (9CI) (CA INDEX NAME)



RN 112557-09-2 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-hexyl-3,4-dihydro-4-oxo-  
(9CI) (CA INDEX NAME)



L6 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2002 ACS

AN 1987:102242 CAPLUS

DN 106:102242

TI Antitumor imidazotetrazines. 14. Synthesis and antitumor activity of 6- and 8-substituted imidazo[5,1-d]-1,2,3,5-tetrazinones and 8-substituted pyrazolo[5,1-d]-1,2,3,5-tetrazinones

AU Lunt, Edward; Newton, Christopher G.; Smith, Christopher; Stevens, Graham P.; Stevens, Malcolm F. G.; Straw, Colin G.; Walsh, Roger J. A.; Warren, Peter J.; Fizames, Christian; et al.

CS Res. Inst., May and Baker Ltd., Dagenham/Essex, RM10 7XS, UK

SO J. Med. Chem. (1987), 30(2), 357-66

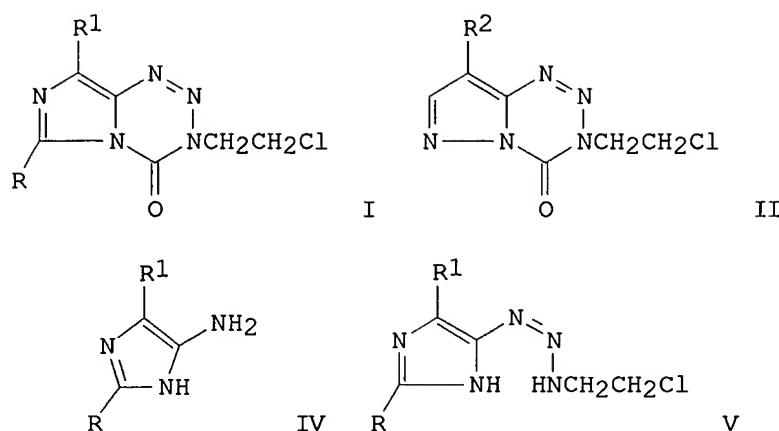
CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

OS CASREACT 106:102242

GI



**AB**      Imidazo[5,1-d]-1,2,3,5-tetrazinones I (R = alkyl or aralkyl, R1 = CONH2; R = H, R1 = CONHMe, CONMe2, CN, SO2Me, SO2NHMe, etc.) and pyrazolo[5,1-d]-1,2,3,5-tetrazinones II (R2 = CONH2, CONMe2, NO2, SO2Me) were prep'd. as derivs. of the antitumor agent mitozolomide (I; R = H, R1 = CONH2) (III). Thus, imidazoles IV were diazotized and the cyclized with ClCH2CH2NCO to give the corresponding I. I (R = alkyl or aralkyl, R1 = CONH2) showed optimal antitumor activity when the group was small or linear, but activity diminished as size and branching of this substituent increased. This may reflect altered transport characteristics, or failure of the enlarged derivs. to fit a binding site, or possibly a reduced tendency for the derivs. having bulky groups at position 6 to hydrolytically generate the putatively active triazenes V. Testing of 14 derivs. of III substituted differently at position 8 revealed a complex structure-activity relationship, with good antitumor activity obtained for carbamoyl and sulfamoyl groups bearing small substituents. The 8-methylsulfonyl compd. had noteworthy activity, but the 8-cyano, 8-nitro, and 8-Ph derivs. were devoid of useful antitumor activity.

**IT**      85622-95-3DP, Mitozolomide, derivs. 90521-16-7P

90521-26-9P 90521-27-0P 90521-28-1P

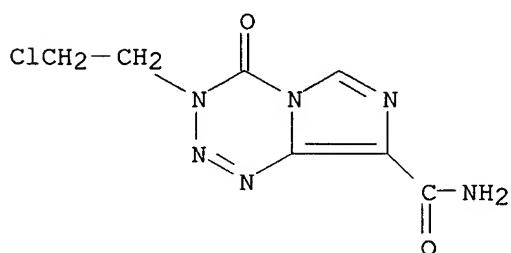
90521-29-2P 90521-30-5P 90521-31-6P

90521-32-7P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)** (prepn. and antitumor activity of)

**RN**      85622-95-3 CAPLUS

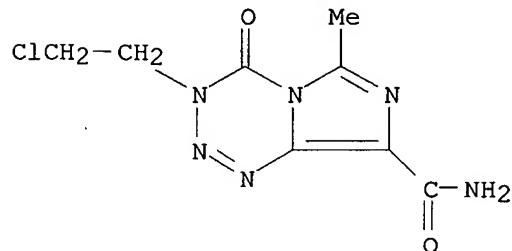
**CN**      Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



V. Balasubramanian

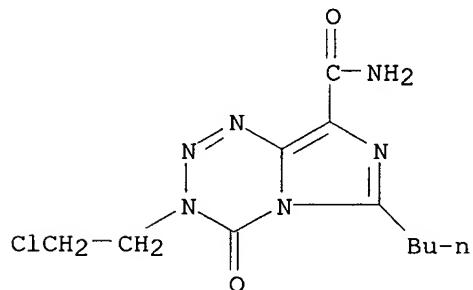
RN 90521-16-7 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-3,4-dihydro-6-methyl-4-oxo- (9CI) (CA INDEX NAME)



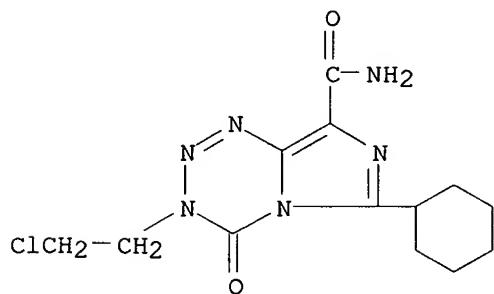
RN 90521-26-9 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 6-butyl-3-(2-chloroethyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



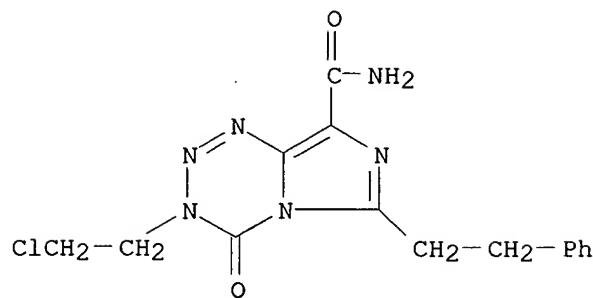
RN 90521-27-0 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-6-cyclohexyl-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



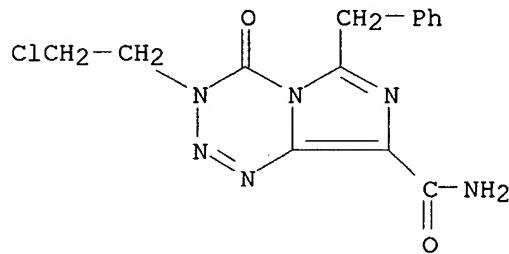
RN 90521-28-1 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-3,4-dihydro-4-oxo-6-(2-phenylethyl)- (9CI) (CA INDEX NAME)



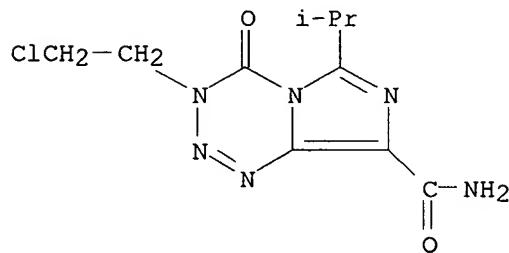
RN 90521-29-2 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-3,4-dihydro-4-oxo-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



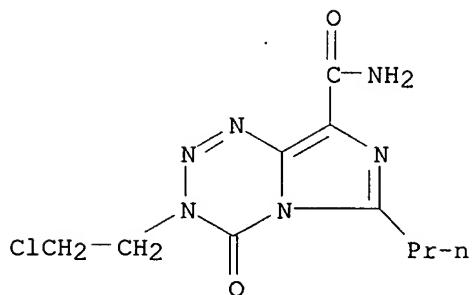
RN 90521-30-5 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-3,4-dihydro-6-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)



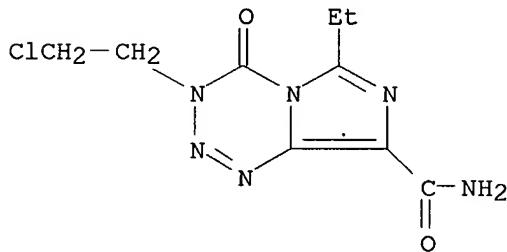
RN 90521-31-6 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-3,4-dihydro-4-oxo-6-propyl- (9CI) (CA INDEX NAME)



RN 90521-32-7 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-6-ethyl-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



L6 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2002 ACS

AN 1984:423509 CAPLUS

DN 101:23509

TI Tetrazine derivatives

IN Baig, Ghous Umissa; Stevens, Malcolm Francis Graham; Lunt, Edward; Newton, Christopher Gregory; Pedgrift, Brian Leslie; Smith, Christopher; Straw, Colin Geoffrey; Walsh, Roger John Aitchison; Warren, Peter James

PA May and Baker Ltd., UK

SO Ger. Offen., 74 pp.

CODEN: GWXXBX

DT Patent

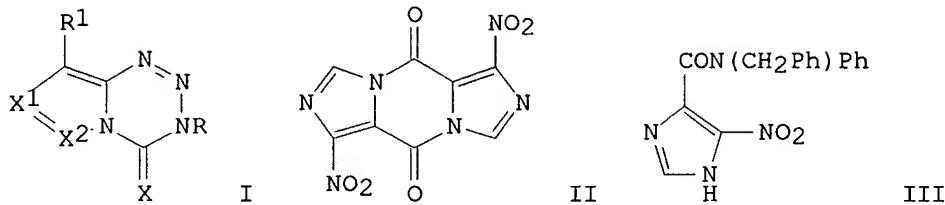
LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3329505	A1	19840223	DE 1983-3329505	19830816
	FR 2531958	A1	19840224	FR 1983-13246	19830812
	FR 2531958	B1	19861031		
	SE 8304415	A	19840218	SE 1983-4415	19830815
	SE 455198	B	19880627		
	SE 455198	C	19881006		
	FI 8302927	A	19840218	FI 1983-2927	19830815
	FI 80273	B	19900131		
	FI 80273	C	19900510		
	AU 8317968	A1	19840223	AU 1983-17968	19830815
	AU 575782	B2	19880811		
	GB 2125402	A1	19840307	GB 1983-21942	19830815
	GB 2125402	B2	19851113		

V. Balasubramanian

NL	8302863	A	19840316	NL	1983-2863	19830815
HU	31735	O	19840528	HU	1983-2860	19830815
HU	189321	B	19860630			
ZA	8306003	A	19840725	ZA	1983-6003	19830815
IL	69500	A1	19890131	IL	1983-69500	19830815
CA	1254563	A1	19890523	CA	1983-434582	19830815
DK	8303749	A	19840218	DK	1983-3749	19830816
AT	8302942	A	19911115	AT	1983-2942	19830816
BE	897548	A1	19840217	BE	1983-211366	19830817
JP	59053488	A2	19840328	JP	1983-149273	19830817
ES	524995	A1	19850101	ES	1983-524995	19830817
CH	657855	A	19860930	CH	1983-4490	19830817
PRAI	GB 1982-23580		19820817			
	GB 1982-23583		19820817			
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	GB 1983-6904		19830314			
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OS	CASREACT	101:23509				
GI						

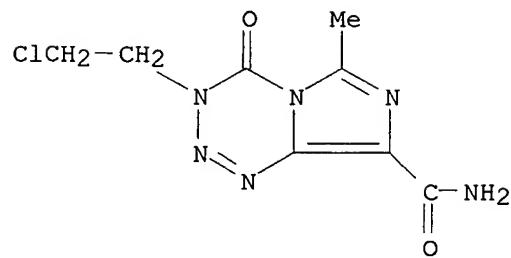


AB   Antineoplastic (no data) azolotetrazolines I [R = (un)substituted alkyl, alkenyl, alkynyl, cycloalkyl; R1 = R2S(O)n, sulfamoyl, carbamoyl, acyl, etc.; R2 = alkyl, alkenyl; n = 0-2; X = O, S; X1 or X2 = N, the other = CR3; R3 = H, halo, cyano, OH, NO2, (un)substituted alkyl, alkenyl, Ph, PhO, acyl, etc.] were prepd. Thus, 5-nitro-1H-imidazole-4-carboxylic acid was self-cyclocondensed by heating with PC15 to give diimidazopyrazinedione II. This was treated with PhCH2NHPh to give imidazolecarboxamide III.HCl, which was hydrogenated to the amine, condensed with NaN3 to give the 5-diazo deriv., and cyclocondensed with MeNCO to give I [R = Me, R1 = CON(CH2Ph)Ph, X, = O, X1 = CH, X2 = N].

IT   90521-16-7P 90521-26-9P 90521-27-0P  
90521-28-1P 90521-29-2P 90521-30-5P  
90521-31-6P 90521-32-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

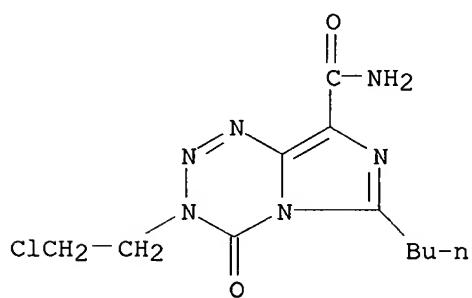
RN   90521-16-7 CAPLUS

CN   Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-3,4-dihydro-6-methyl-4-oxo- (9CI) (CA INDEX NAME)



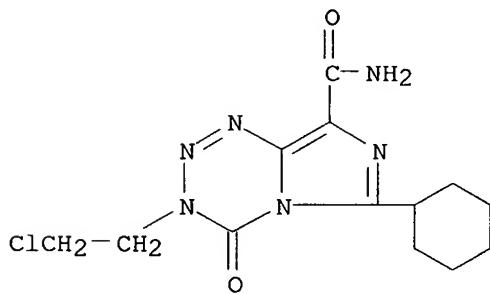
RN 90521-26-9 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 6-butyl-3-(2-chloroethyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



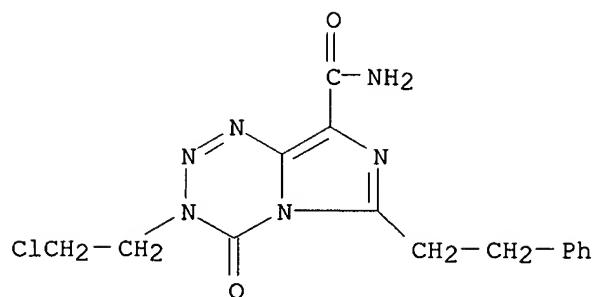
RN 90521-27-0 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-6-cyclohexyl-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



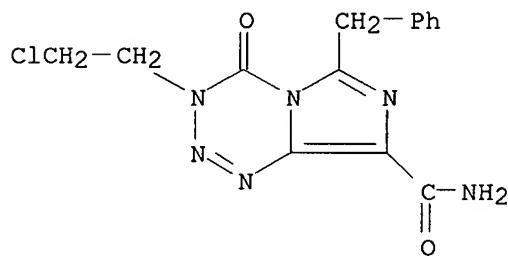
RN 90521-28-1 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-3,4-dihydro-4-oxo-6-(2-phenylethyl)- (9CI) (CA INDEX NAME)



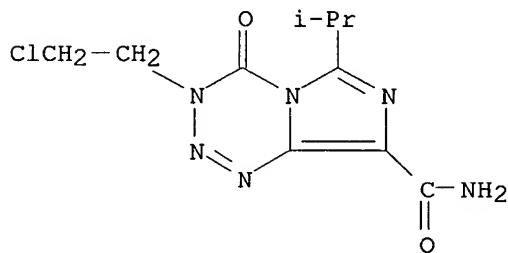
RN 90521-29-2 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-3,4-dihydro-4-oxo-6-(phenylmethyl)- (9CI) (CA INDEX NAME)



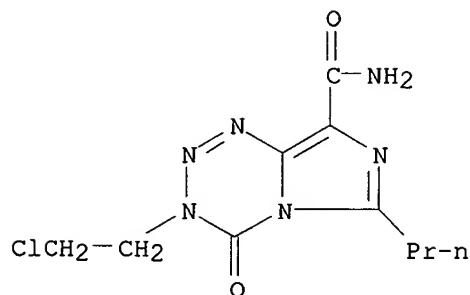
RN 90521-30-5 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-3,4-dihydro-6-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)



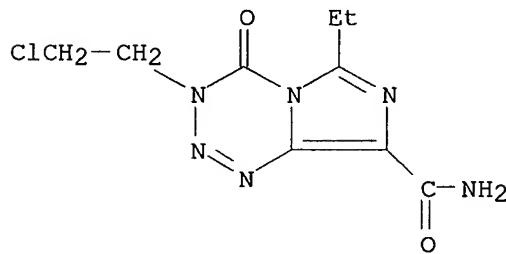
RN 90521-31-6 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-3,4-dihydro-4-oxo-6-propyl- (9CI) (CA INDEX NAME)



RN 90521-32-7 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-6-ethyl-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



L6 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2002 ACS

AN 1984:51553 CAPLUS

DN 100:51553

TI Antitumour imidazotetrazines. 1. Synthesis and chemistry of 8-carbamoyl-3-(2-chloroethyl)imidazo[5,1-d]-1,2,3,5-tetrazin-4(3H)-one, a novel broad-spectrum antitumor agent

AU Stevens, Malcolm F. G.; Hickman, John A.; Stone, Robert; Gibson, Neil W.; Baig, Ghousie Unissa; Lunt, Edward; Newton, Christopher G.

CS Dep. Pharm., Univ. Aston, Birmingham, B4 7ET, UK

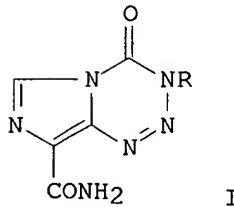
SO J. Med. Chem. (1984), 27(2), 196-201

CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

GI



AB Interaction of 5-diazo-4-imidazolecarboxamide and alkyl and aryl isocyanates in the dark gave 8-carbamoylimidazo[5,1-d]-1,2,3,5-tetrazin-

V. Balasubramanian

4(3H)-ones (I). In cold MeOH or EtOH, I ( $R = ClCH_2CH_2$ ; II) decompd to give 2-azahypoxanthine and  $ClCH_2CH_2NHCO_2R$  ( $R = Me, Et$ ). II was active against L-1210 and P388 leukemia and may act as a prodrug modification of the acyclic triazene 5-[3-(2-chloroethyl)traizen-1-yl]imidazole-4-carboxamide (MCTIC), since it underwent ring opening to form the triazene in aq.  $Na_2CO_3$ .

IT 85622-93-1P 85622-94-2P 87597-51-1P

87597-52-2P 87597-53-3P 87597-54-4P

87597-55-5P 87597-56-6P 87597-57-7P

87597-58-8P

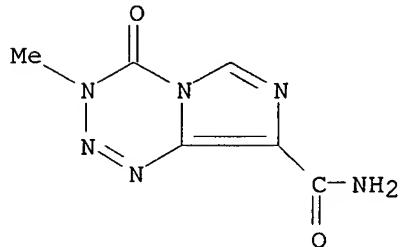
RL: RCT (Reactant); SPN (Synthetic preparation); PREP

(Preparation)

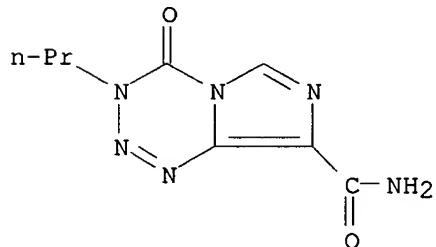
(prepn. and decompn. of)

RN 85622-93-1 CAPLUS

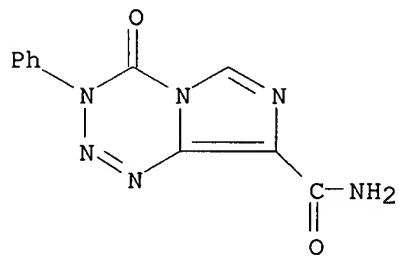
CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-methyl-4-oxo- (9CI) (CA INDEX NAME)



CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-4-oxo-3-propyl- (9CI) (CA INDEX NAME)

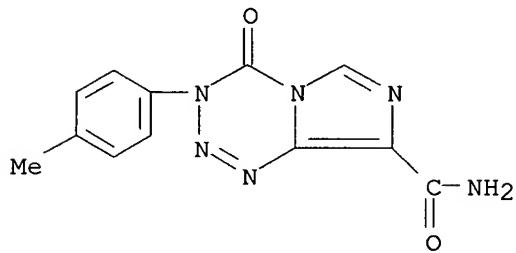


CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-4-oxo-3-phenyl- (9CI) (CA INDEX NAME)



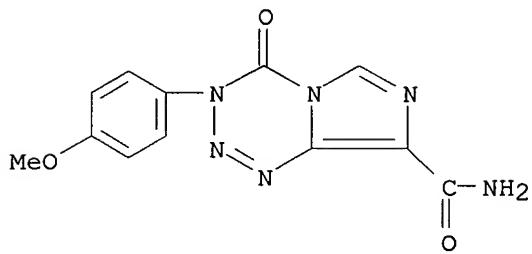
RN 87597-52-2 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-(4-methylphenyl)-4-oxo- (9CI) (CA INDEX NAME)



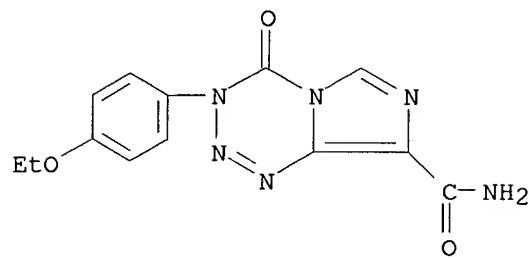
RN 87597-53-3 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-(4-methoxyphenyl)-4-oxo- (9CI) (CA INDEX NAME)



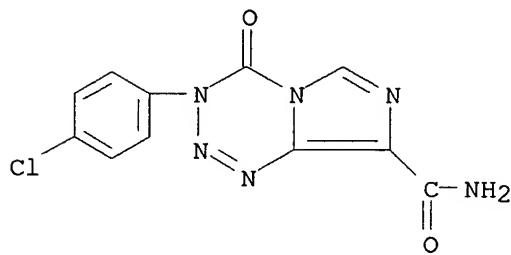
RN 87597-54-4 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(4-ethoxyphenyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



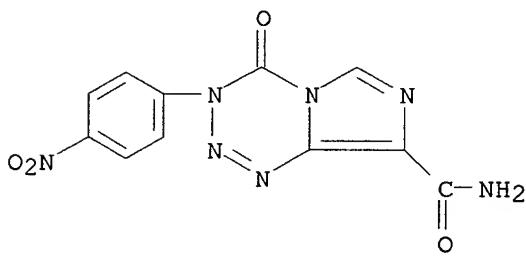
RN 87597-55-5 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(4-chlorophenyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



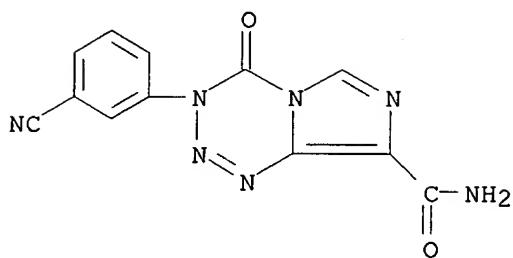
RN 87597-56-6 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-(4-nitrophenyl)-4-oxo- (9CI) (CA INDEX NAME)



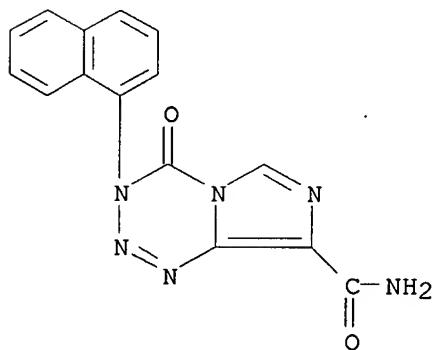
RN 87597-57-7 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(3-cyanophenyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



RN 87597-58-8 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-(1-naphthalenyl)-4-oxo- (9CI) (CA INDEX NAME)

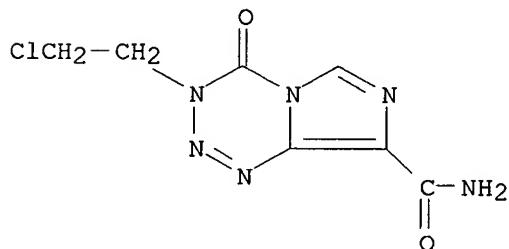


IT 85622-95-3P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(prepn., degrdn., and antitumor activity of)

RN 85622-95-3 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



L6 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2002 ACS

AN 1983:198285 CAPLUS

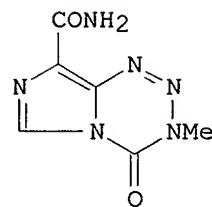
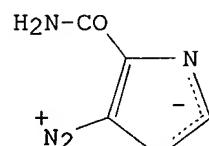
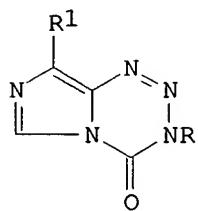
DN 98:198285

TI Tetrazine derivatives and pharmaceutical compositions containing them  
IN Lunt, Edward; Stevens, Malcolm Francis Graham; Stone, Robert; Wooldridge, Kenneth Robert Harry

V. Balasubramanian

PA May and Baker Ltd., UK  
 SO Ger. Offen., 29 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3231255	A1	19830303	DE 1982-3231255	19820823
	DE 3231255	C2	19920227		
	IL 66606	A1	19870731	IL 1982-66606	19820812
	BE 894175	A1	19830223	BE 1982-208860	19820823
	DK 8203778	A	19830225	DK 1982-3778	19820823
	DK 161147	B	19910603		
	DK 161147	C	19911118		
	FI 8202921	A	19830225	FI 1982-2921	19820823
	FI 73434	B	19870630		
	FI 73434	C	19871009		
	FR 2511679	A1	19830225	FR 1982-14461	19820823
	FR 2511679	B1	19850201		
	SE 8204817	A	19830225	SE 1982-4817	19820823
	SE 448543	B	19870302		
	SE 448543	C	19870611		
	AU 8287493	A1	19830303	AU 1982-87493	19820823
	AU 571430	B2	19880421		
	GB 2104522	A1	19830309	GB 1982-24155	19820823
	GB 2104522	B2	19850612		
	JP 58043975	A2	19830314	JP 1982-144902	19820823
	JP 04005029	B4	19920130		
	NL 8203286	A	19830316	NL 1982-3286	19820823
	NL 192739	B	19970901		
	NL 192739	C	19980106		
	ZA 8206120	A	19830727	ZA 1982-6120	19820823
	ES 515176	A1	19831101	ES 1982-515176	19820823
	HU 27908	O	19831128	HU 1982-2708	19820823
	HU 186107	B	19850628		
	AT 8203191	A	19850915	AT 1982-3191	19820823
	AT 380256	B	19860512		
	CA 1197247	A1	19851126	CA 1982-409950	19820823
	CH 655114	A	19860327	CH 1982-5007	19820823
	SU 1447284	A3	19881223	SU 1982-3482389	19820823
PRAI	GB 1981-25791	A	19810824		
GI					



AB I [R = (un)substituted H, alkyl, alkenyl, alkynyl, aryl, cycloalkyl; R1 = (un)substituted carbamoyl] were prep'd. as antitumor agents (no data). Thus, 500 mg II in 3.0 mL MeNCO were stirred in the dark 21 days to give

V. Balasubramanian

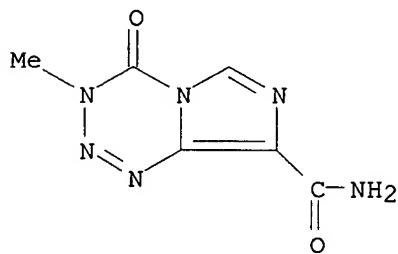
198 mg III.

IT 85622-93-1P 85622-94-2P 85622-95-3P  
 85622-97-5P 85622-98-6P 85622-99-7P  
 85623-01-4P 85623-02-5P 85623-03-6P  
 85623-04-7P 85623-05-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

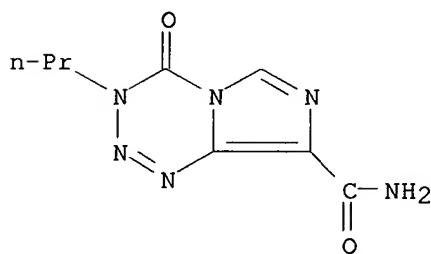
RN 85622-93-1 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-methyl-4-oxo-  
 (9CI) (CA INDEX NAME)



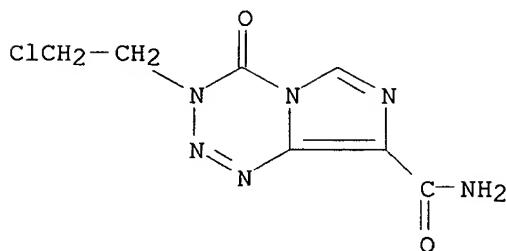
RN 85622-94-2 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-4-oxo-3-propyl-  
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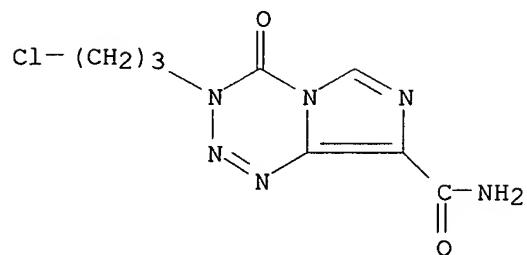
RN 85622-95-3 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-chloroethyl)-3,4-  
 dihydro-4-oxo- (9CI) (CA INDEX NAME)



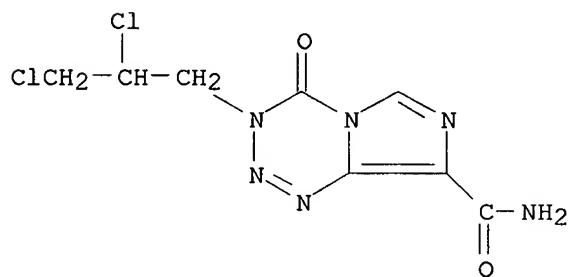
RN 85622-97-5 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(3-chloropropyl)-3,4-  
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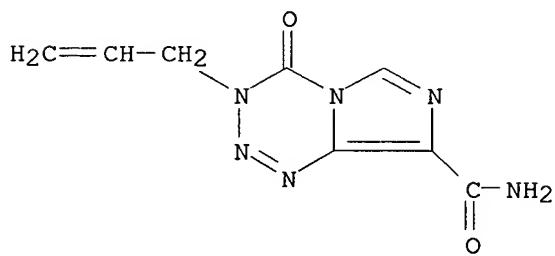
RN 85622-98-6 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2,3-dichloropropyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



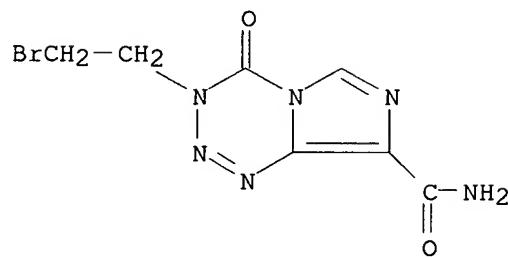
RN 85622-99-7 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-4-oxo-3-(2-propenyl)- (9CI) (CA INDEX NAME)



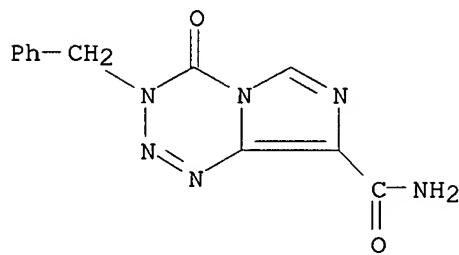
RN 85623-01-4 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-(2-bromoethyl)-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



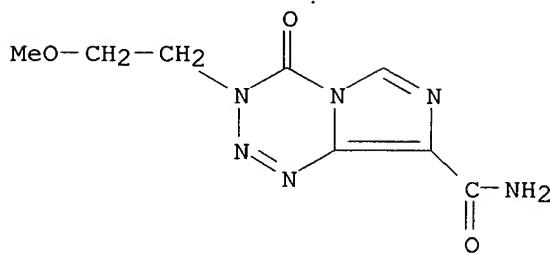
RN 85623-02-5 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-4-oxo-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



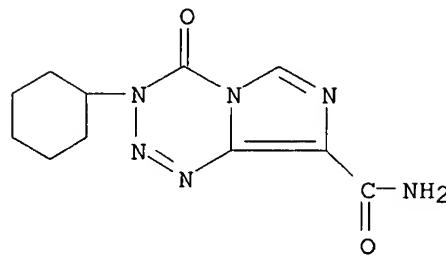
RN 85623-03-6 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-(2-methoxyethyl)-4-oxo- (9CI) (CA INDEX NAME)



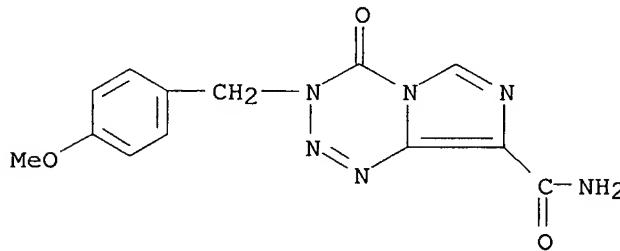
RN 85623-04-7 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3-cyclohexyl-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



RN 85623-05-8 CAPLUS

CN Imidazo[5,1-d]-1,2,3,5-tetrazine-8-carboxamide, 3,4-dihydro-3-[(4-methoxyphenyl)methyl]-4-oxo- (9CI) (CA INDEX NAME)



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COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL

SESSION

FULL ESTIMATED COST 77.43 220.20

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

ENTRY

TOTAL

SESSION

CA SUBSCRIBER PRICE -10.53 -10.53

STN INTERNATIONAL LOGOFF AT 16:30:29 ON 06 MAY 2002